# MODEL

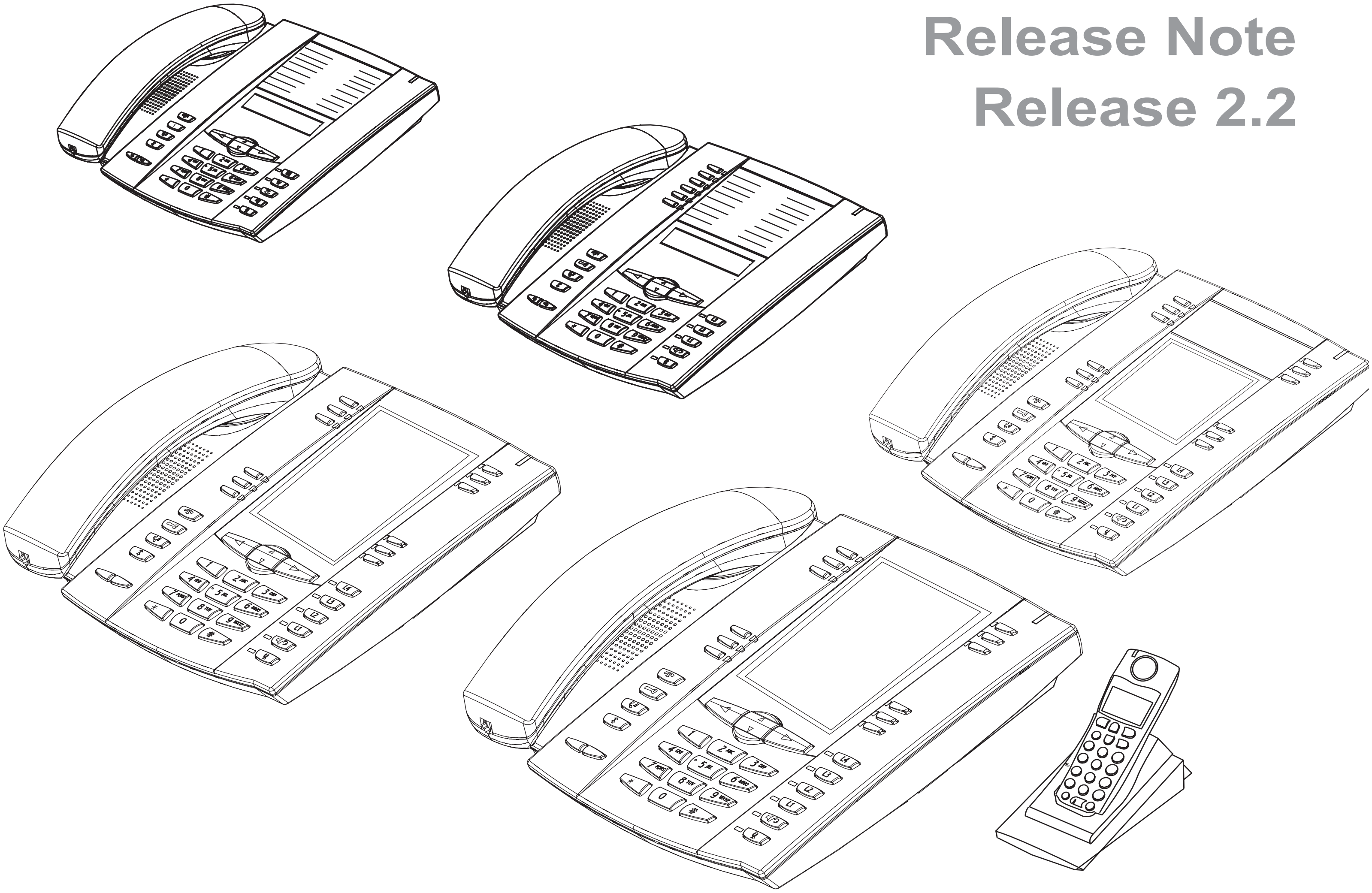
## 51i, 53i, 55i, 57i, and 57i CT

# SIP IP PHONE

RN-001029-00
Rev 06

## Release Note

## Release 2.2



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# SIP IP Phone
# Models 51i, 53i, 55i, 57i, and 57i CT
# Release Note 2.2

## About this Document

This document provides an overview of the 2.2 features on the 5i Series phones (51i, 53i, 55i, 57i, and 57i CT).

For more detailed information about the features associated with each phone, and for information on how to use the phones, see your model-specific *SIP IP Phone Installation Guide* and the *SIP IP Phone User Guide*. For detailed information about more advanced features, see the *SIP IP Phone Administrator Guide*.

Topics in this release note include:

- General Information
  (release content, hardware supported, bootloader requirements)
- Features in Release 2.2
- Issues Resolved on Series 5i Phones in Release 2.2
- Contacting Aastra Telecom Support

# General Information

## Release Content Information

This document provides release content information on the Aastra 51i, 53i, 55i, 57i, and 57i CT SIP IP phone firmware.

| Model | Release Name | Release Version | Release Filename | Release Date |
|---|---|---|---|---|
| 51i | Generic SIP | 2.2 | FC-001126-00-06 | March 2008 |
| 53i | Generic SIP | 2.2 | FC-001086-00-09 | March 2008 |
| 55i | Generic SIP | 2.2 | FC-001087-00-09 | March 2008 |
| 57i | Generic SIP | 2.2 | FC-001088-00-09 | March 2008 |
| 57i CT | Generic SIP | 2.2 | FC-001089-00-09 | March 2008 |

## Hardware Supported

This release of firmware is compatible with the following Aastra IP portfolio products:

- 51i
- 53i
- 55i
- 57i
- 57i CT

## Bootloader Requirements

This release of firmware is compatible with the following Aastra IP portfolio product bootloader versions:

- 51i - Bootloader 2.0.1.1055 or higher
- 53i - Bootloader 2.0.1.1055 or higher
- 55i - Bootloader 2.0.1.1055 or higher
- 57i - Bootloader 2.0.1.1055 or higher
- 57i CT - Bootloader 2.0.1.1055 or higher

# Features in Release 2.2

## Description

This section describes the new features included in Release 2.2 of the 5i Series IP Phones. The following table specifies the 2.2 Features and provides the page number for each feature.

| Feature | Page Number |
|---|---|
| ***Usability Features*** | |
| Dial Plan Support for Secondary Dial Tone | page 5 |
| Account-Based Do Not Disturb (DND) and Call Forward (CFWD) | page 6 |
| Multicast Group Paging | page 60 |
| Simplified Transfer Using BLF and Speeddial Keys | page 68 |
| Ability to Disable Switching Focus to a Ringing Line When on a Call | page 74 |
| ***Security Features*** | |
| 802.1x Support | page 76 |
| Improved Configuration File Encryption | page 90 |
| ***Deployability Features*** | |
| SIP NOTIFY Triggers an XML Event | page 91 |
| RTP and Multicast RTP via XML | page 97 |
| Text Wrap for XML TextMenu Items | page 102 |
| Non-Blocking HTTP Connections | page 103 |
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| ***Deployability Features*** | |
| SIP Registration Status in Aastra Web UI | page 106 |
| Support for HTTP and HTTPS Configuration Servers on Non-Standard Ports | page 108 |
| Ability to Set TFTP and FTP Path for Configuration Servers | page 113 |
| ***Deployability Features*** | |
| Configurable SIP and TLS Source Ports | page 120 |
| RPORT Support | page 123 |

| Feature | Page Number |
|---|---|
| ***BroadSoft Interoperability Features*** | |
| CMS Support | page 126 |
| Server-Side Do Not Disturb (DND), Call Forward (CFWD) , and Automatic Call Distribution (ACD) Support | page 130 |

# Usability Features

## Dial Plan Support for Secondary Dial Tone

The IP phones now support a feature that allows the user to dial a predefined dial string, obtain a dial tone, and continue dialing. A User or Administrator can configure this using the existing Dial Plan feature on the phone.

You can enter a new character string in the dial plan that allows you to configure the secondary dial tone. The character string is of the form "**.;.**" , where the period indicates an arbitrary number of digits and the semicolon indicates that the phone is to present a dial tone after the previous dialed digit. For example, in the string:

"9;xxxxx"

the user dials "**9**" to get the outside line, listens for the dial tone, and continues to dial the applicable number. The "**;**" tells the phone to present a second dial tone after the previously dialed digit. "The "xxxxx" in the example tells the phone that a phone number is dialed after the secondary dial tone is audible.

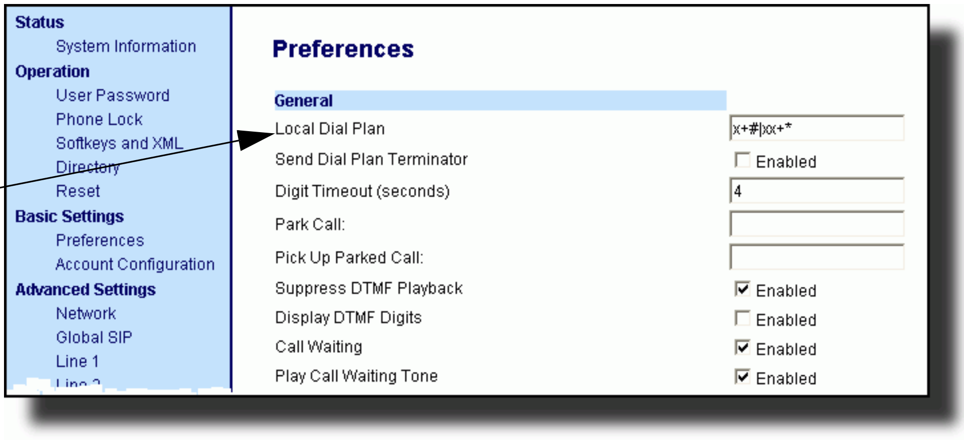
You can enter the Secondary Dial Tone string in the Dial Plan using the configuration files or the Aastra Web UI.

You use the following parameter in the configuration files to configure a secondary dial tone:

- **sip dial plan**

  **Example:** sip dial plan: **"9;xxxxxxx"**

You use the following parameter in the Aastra Web UI to configure a secondary dial tone:


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2

**Local Dial Plan**

**Preferences**

**General**

| | |
|---|---|
| Local Dial Plan | x+#\|xx+* |
| Send Dial Plan Terminator | ☐ Enabled |
| Digit Timeout (seconds) | 4 |
| Park Call: | |
| Pick Up Parked Call: | |
| Suppress DTMF Playback | ☑ Enabled |
| Display DTMF Digits | ☐ Enabled |
| Call Waiting | ☑ Enabled |
| Play Call Waiting Tone | ☑ Enabled |

## Account-Based Do Not Disturb (DND) and Call Forward (CFWD)

In previous releases of the IP Phone, you could configure a DND key to set "do not disturb" on all the lines on the phone. Also in previous releases, you could configure CFWD on all lines (global settings) or on specific lines (local settings) on the phone.

In Release 2.2, the IP phones have a new DND and CFWD feature that allows an Administrator and User to configure "do not disturb" and "call forwarding" by account. You can set specific modes for the way you want the phone to handle DND and CFWD. The three modes you can set on the phone for these features are:

- **Account**
- **Phone**
- **Custom**.

The following paragraphs describe account-based DND and CFWD:

- DND Account-Based Configuration
- CFWD Account-Based Configuration

### *DND Account-Based Configuration*

Previous to release 2.2, DND was configurable on the phone-side only on a global basis by configuring a DND key. Now an Administrator or User can configure DND on the phone-side by setting a mode for the phone to use (**account**, **phone**, or **custom**). Once the mode is set, you can use the IP Phone UI to use the DND feature.

➡ **Note:** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to "Phone".

The following describes the softkey behavior for each DND mode.

- **Account** - DND key toggles the account in focus on the IP Phone UI, to ON or OFF if DND enabled for that account.
- **Phone** - DND key toggles all accounts on the phone to ON or OFF.
- **Custom** - DND key displays custom screens on the IP Phone UI. User can select whether to enable/disable DND per account, enable DND on all accounts, or disable DND on all accounts.

The following table describes the softkey and Message Waiting Indicator (MWI) LEDs when you enable DND on the IP Phone.

| Softkey LED Behavior for All Modes | MWI LED Behavior for All Modes |
|---|---|
| **DND key LED** RED if current account in focus has DND ON.<br>**DND key LED OFF** when current account in focus has DND disabled. | **MWI LED ON** if current account in focus has DND ON.<br>**MWI LED OFF** if current account in focus has DND OFF. |

You can configure the DND softkey and the DND mode (**Account**, **Phone**, **Custom**) using the configuration files or the Aastra Web UI. Once you configure DND, you can access the DND screen on the IP Phone UI.

### Important Notes

- In the Aastra Web UI, the “Account Configuration” page replaces the previous “Call Forward Settings” page.
- In the IP Phone UI, the new DND key feature now has new menu screens.
- **If you make changes to the configuration for DND via the IP Phone UI, you must refresh the Aastra Web UI screen to see the changes.**

### *Configuring DND Using the Configuration Files*

You use the following parameters to configure DND on the IP Phone:

- **dnd key mode**
- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **softkeyN states** (optional)

| **Parameter –**<br>*dnd key mode* | **Aastra Web UI:** Basic Settings->Preferences->General<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Sets the mode for how the phone uses “do not disturb” (DND):<br>• **account** Sets DND for a specific account. DND key toggles the account in focus on the IP Phone UI, to ON or OFF.<br>• **phone** Sets DND ON for all accounts on the phone. DND key toggles all accounts on the phone to ON or OFF.<br>• **custom** Sets the phone to display custom screens after pressing the DND key, that list the account(s) on the phone. The user can select a specific account for DND, turn DND ON for all accounts, or turn DND OFF for all accounts.<br>**Note:** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to “Phone”.. |
| **Format** | Integer |
| **Default Value** | 1 (phone) |
| **Range** | 0 (account)<br>1 (phone)<br>2 (custom) |
| **Example** | dnd key mode: 2 |

You use the following parameters to configure a DND softkey:

- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **softkeyN states** (optional)

➡ **Note:** If there is no DND key configured or if it is removed, DND is disabled on the IP Phone.

### Example

The following is an example of configuring the mode for DND in the configuration files:

```
dnd key mode: 2
softkey1 type: dnd
softkey1 states: idle connected incoming outgoing busy
```

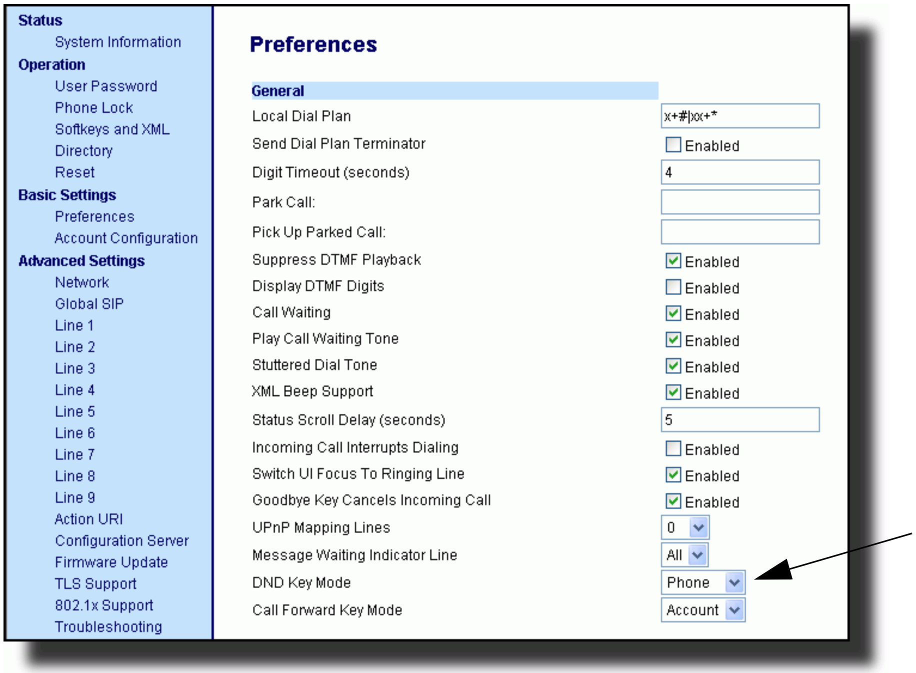
In the above example, softkey 1 is configured for DND for line 1 only, with a "**custom**" configuration. Pressing softkey 1 displays DND screens for which you can customize on the phone. For specific screens that display in the IP Phone UI, see the section, "Using DND Modes via the IP Phone UI" on page 13.

### *Configuring DND Using the Aastra Web UI*

Use the following procedure to configure DND mode using the Aastra Web UI:

## Aastra Web UI

1 Click on **Basic Settings->Preferences->General.**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Preferences**

| General | |
|---|---|
| Local Dial Plan | x+#\|xx+* |
| Send Dial Plan Terminator | ☐ Enabled |
| Digit Timeout (seconds) | 4 |
| Park Call: | |
| Pick Up Parked Call: | |
| Suppress DTMF Playback | ☑ Enabled |
| Display DTMF Digits | ☐ Enabled |
| Call Waiting | ☑ Enabled |
| Play Call Waiting Tone | ☑ Enabled |
| Stuttered Dial Tone | ☑ Enabled |
| XML Beep Support | ☑ Enabled |
| Status Scroll Delay (seconds) | 5 |
| Incoming Call Interrupts Dialing | ☐ Enabled |
| Switch UI Focus To Ringing Line | ☑ Enabled |
| Goodbye Key Cancels Incoming Call | ☑ Enabled |
| UPnP Mapping Lines | 0 |
| Message Waiting Indicator Line | All |
| DND Key Mode | Phone |
| Call Forward Key Mode | Account |

**DND Key Mode Parameter**

2 In the "**DND Key Mode**" field, select a "do not disturb" (DND) mode to use on the phone. Valid values are: Account, Phone, Custom. Default is **Phone**.

| | |
|---|---|
| • **account** | Sets DND for a specific account. DND key toggles the account in focus on the IP Phone UI, to ON or OFF. |
| • **phone** | Sets DND ON for all accounts on the phone. DND key toggles all accounts on the phone to ON or OFF. |
| • **custom** | Sets the phone to display custom screens after pressing the DND key, that list the account(s) on the phone. The user can select a specific account for DND, turn DND ON for all accounts, or turn DND OFF for all accounts. |

**Notes**:

**1.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to "Phone".

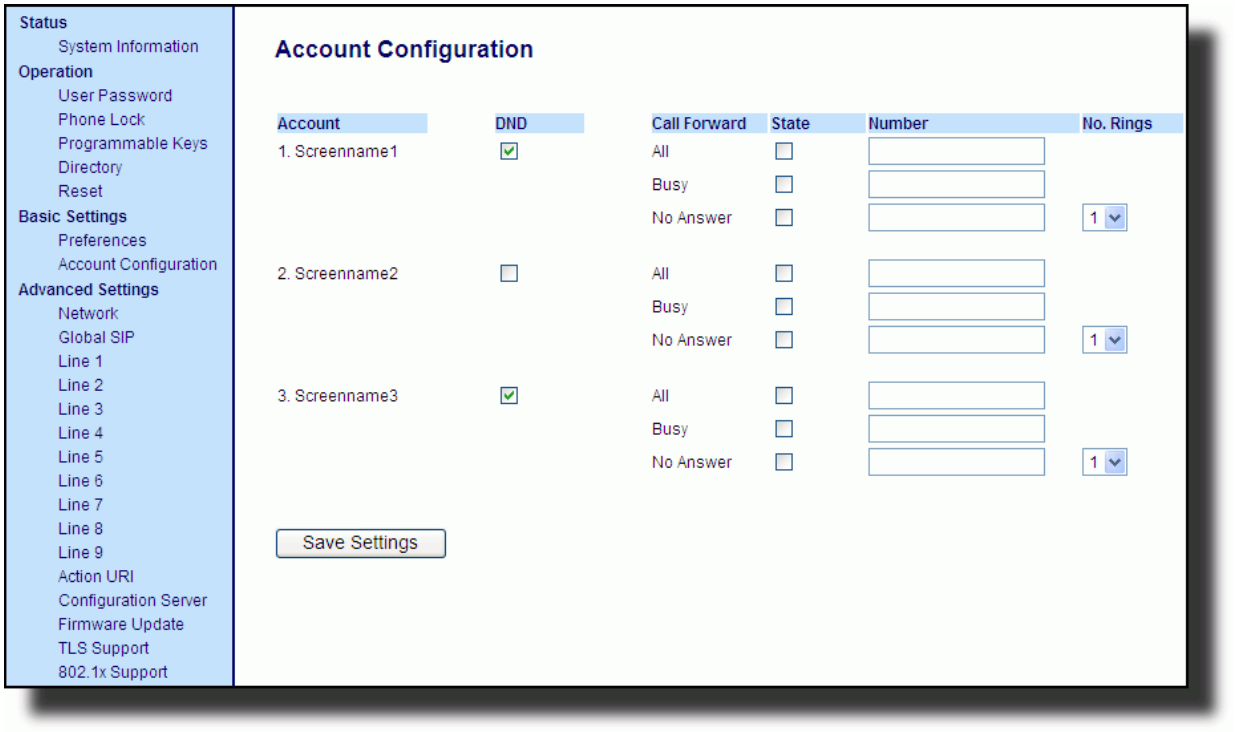
**2.** Using the Aastra Web UI, if you change the DND Key Mode to "phone", all accounts syncrhonize to the current setting of Account 1.

## Aastra Web UI

3 Click **Save Settings** to save your changes.

The change takes effect immediately without a reboot.

4 Click on **Basic Settings->Account Configuration**..


Status
System Information
Operation
User Password
Phone Lock
Programmable Keys
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Save Settings

Account Configuration

| Account | DND | Call Forward | State | Number | No. Rings |
|---|---|---|---|---|---|
| 1. Screenname1 | ☑ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |
| 2. Screenname2 | ☐ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |
| 3. Screenname3 | ☑ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |

5 For each account, enable DND by placing a check mark in the box. Disable DND by unchecking the box.

**Notes**:

**1.** If you selected “**Account**” or “**Custom**” mode in step 2, you can enable/disable each account or all accounts as applicable.
If you selected “**Phone**” mode, the first account allows you to change the DND status for all accounts.

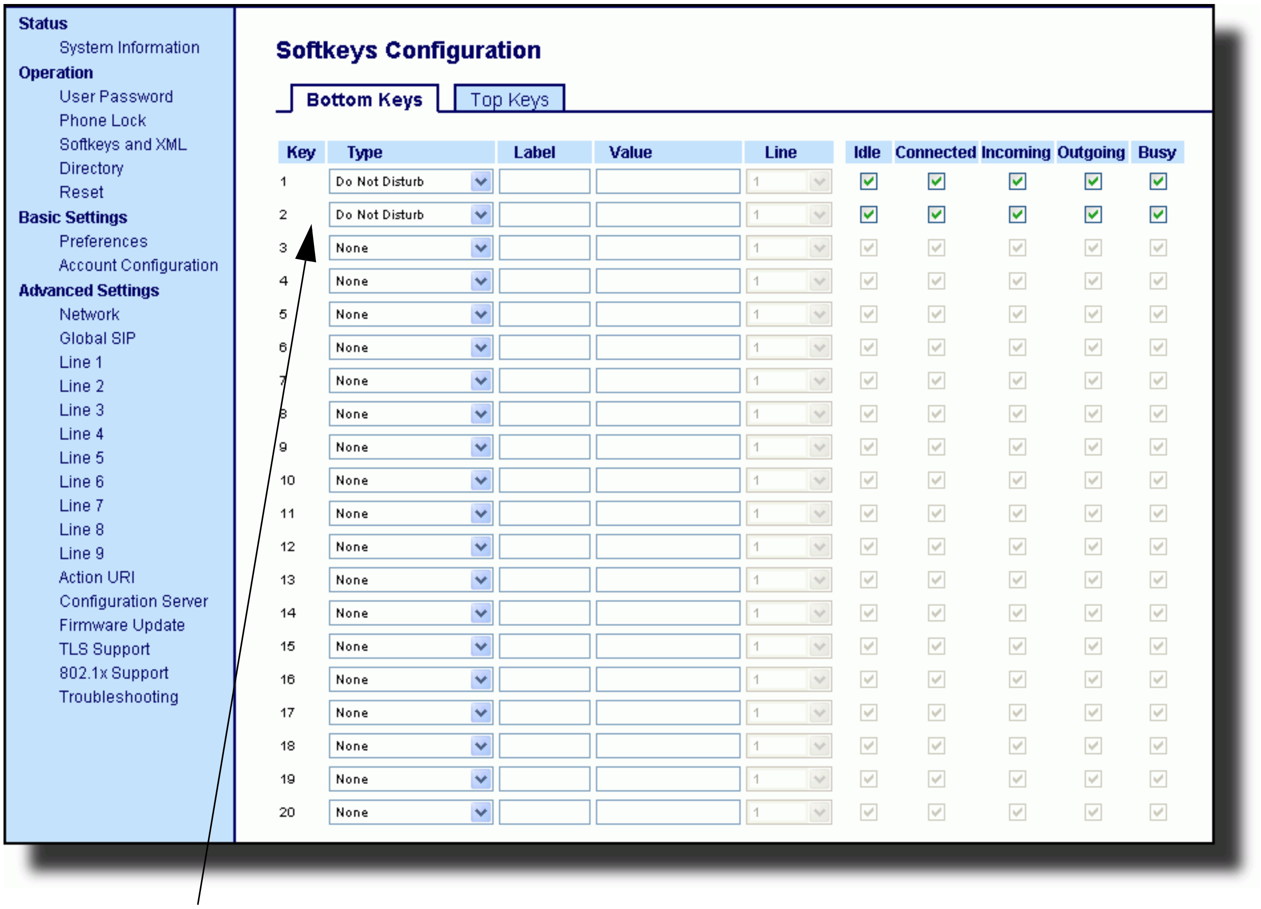
**2.** Number and name of accounts that display to this screen are dependant on the number and name of accounts configured on the phone. In the screen in step 4, Screenname1 is configured on Line 1, Screenname2 is configured on Line 2, and Screenname3 is configured on Line 3. The name for the account is dependant on the name specified for the “**Screen Name**” parameter at the path **Advanced Settings->LineN**. If you do not specify a value for the “Screen Name” parameter, the account name is based on the “**Phone Number**” parameter at the path **Advanced Settings->LineN**. If neither the “Screen Name” nor the “Phone Number” parameters are specified, the account name shows “1”, “2”, “3”, etc. only.

## Aastra Web UI

6 Click **Save Settings** to save your changes.

The change takes effect immediately without a reboot.

7 Click on **Operation->Softkeys and XML**;
or
Click on **Operation->Programmable Keys;**
or
Click on **Operation->Expansion Module**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Bottom Keys
Top Keys

**Softkeys Configuration**

| Key | Type | Label | Value | Line | Idle | Connected | Incoming | Outgoing | Busy |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Do Not Disturb | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 2 | Do Not Disturb | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 3 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 4 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 5 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 6 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 7 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 8 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 9 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 10 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 11 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 12 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 13 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 14 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 15 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 16 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 17 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 18 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 19 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 20 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |

**Softkeys 1 and 2 configured for DND**

**Note:** If there is no DND key configured or if it is removed, DND is disabled on the IP Phone.

8 Click **Save Settings** to save your changes.

### *Using DND Modes via the IP Phone UI*

If you add a DND key using the configuration files or the Aastra Web UI, you can toggle the DND state using the IP Phone UI. Use the following procedure to enable/disable DND on the IP Phone.

The following procedure assumes you have already configured a DND key AND assumes there are three accounts configured on the phone.

**Notes:**

**1.** If there is no DND key configured or if it is removed, DND is disabled on the IP Phone.

**2.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to “Phone”.

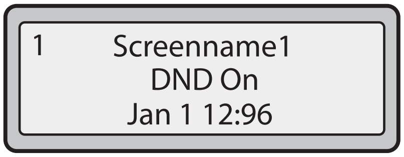
**3.** Using the Aastra Web UI, if you change the DND key mode to “phone”, all accounts synchronize to the current setting of Account 1.

.

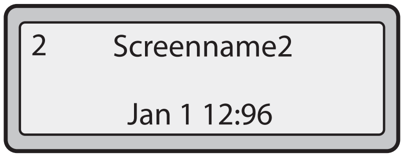
## Aastra IP Phone UI

| Step | Action |
|---|---|
| ***DND in Account Mode*** | |

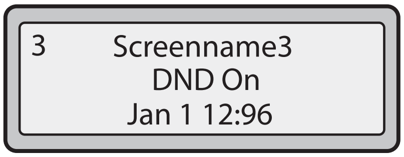
**On the 51i and 53i:**
With the account in focus on the IP Phone UI, press the **DND** key to toggle DND ON or OFF for the account. Use the RIGHT and LEFT arrow keys to scroll through each account.



1 Screenname1
DND On
Jan 1 12:96



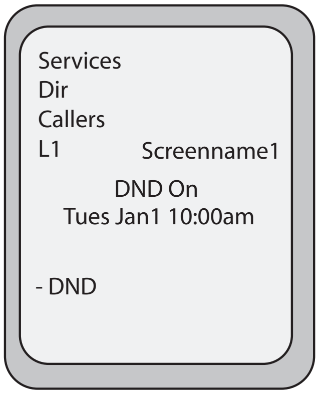
2 Screenname2
Jan 1 12:96



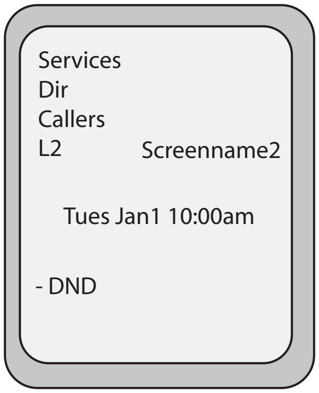
3 Screenname3
DND On
Jan 1 12:96

In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Only Screenname1 and 3 have DND ON. Screenname 2 has DND OFF.

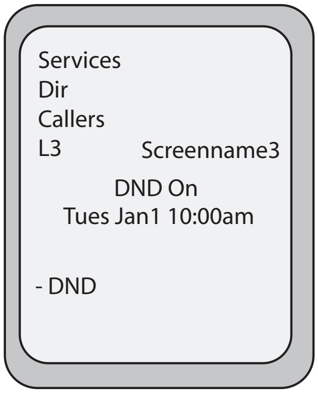
**On the 55i, 57i, and 57i CT:**
With the account in focus on the IP Phone UI, press the **DND** key to toggle DND ON or OFF for the account. Use the RIGHT and LEFT arrow keys to scroll through each account.



Services
Dir
Callers
L1 Screenname1
DND On
Tues Jan1 10:00am
- DND

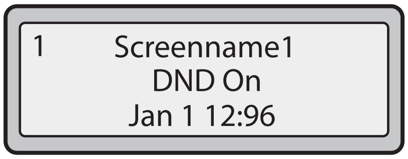
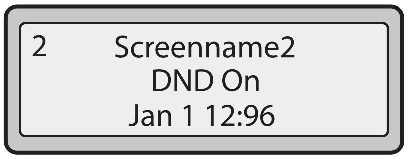
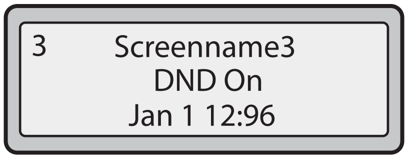
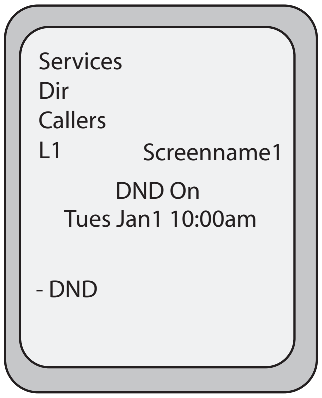
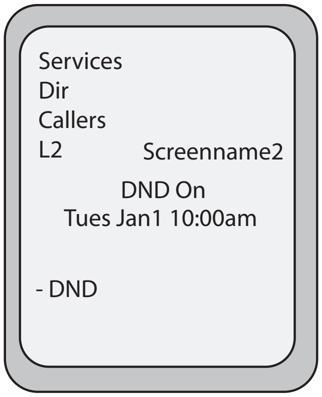
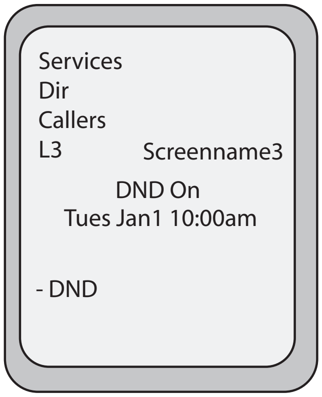


Services
Dir
Callers
L2 Screenname2
Tues Jan1 10:00am
- DND



Services
Dir
Callers
L3 Screenname3
DND On
Tues Jan1 10:00am
- DND

In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Only Screenname1 and 3 have DND ON. Screenname 2 has DND OFF.

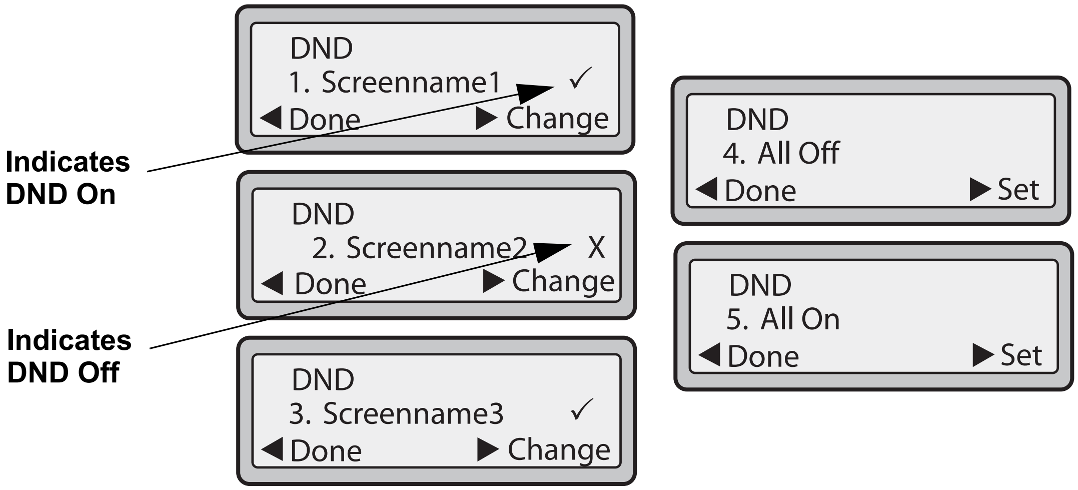
<table>
<tr><th colspan="2">Aastra IP Phone UI</th></tr>
<tr><th>Step</th><th>Action</th></tr>
<tr><td colspan="2"><b><i>DND in Phone Mode</i></b></td></tr>
<tr><td></td><td><b>On the 51i and 53i:</b><br>Press the <b>DND</b> key to toggle DND ON or OFF for all accounts on the phone. Toggling to ON enables DND on all accounts on the phone. Toggling to OFF disables DND on all accounts on the phone. Use the RIGHT and LEFT arrow keys to scroll through each account.<br><br>1 Screenname1<br>DND On<br>Jan 1 12:96<br><br>2 Screenname2<br>DND On<br>Jan 1 12:96<br><br>3 Screenname3<br>DND On<br>Jan 1 12:96<br>In the above example, toggling Screenname1 to DND ON, enabled DND for Screenname2 and 3 also.<br><b>On the 55i, 57i, and 57i CT:</b><br>Press the <b>DND</b> key to toggle DND ON or OFF for all accounts on the phone. Toggling to ON enables DND on all accounts on the phone. Toggling to OFF disables DND on all accounts on the phone. Use the RIGHT and LEFT arrow keys to scroll through each account.<br><br>Services<br>Dir<br>Callers<br>L1 Screenname1<br>DND On<br>Tues Jan1 10:00am<br>- DND<br><br>Services<br>Dir<br>Callers<br>L2 Screenname2<br>DND On<br>Tues Jan1 10:00am<br>- DND<br><br>Services<br>Dir<br>Callers<br>L3 Screenname3<br>DND On<br>Tues Jan1 10:00am<br>- DND<br>In the above example, toggling Screenname1 to DND ON, enbabled DND for Screenname2 and 3 also.<br><b>Note:</b> Enabling DND in “<b>Phone</b>” mode toggles all accounts on the phone to DND ON.</td></tr>
</table>

## Aastra IP Phone UI

**Step** **Action**

### *DND in Custom Mode*

**On the 51i and 53i:**
Press the **DND** key on the phone. The screen displays a list of the accounts on the phone and allows you to enable/disable a specific account or all accounts. Use the UP and DOWN arrow keys to scroll through the accounts.



DND
1. Screenname1 ✓
◀ Done ▶ Change

DND
2. Screenname2 X
◀ Done ▶ Change

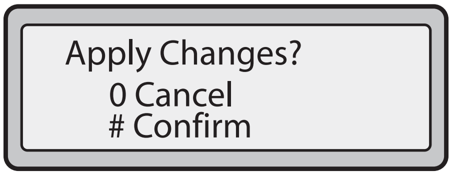
DND
3. Screenname3 ✓
◀ Done ▶ Change

DND
4. All Off
◀ Done ▶ Set

DND
5. All On
◀ Done ▶ Set

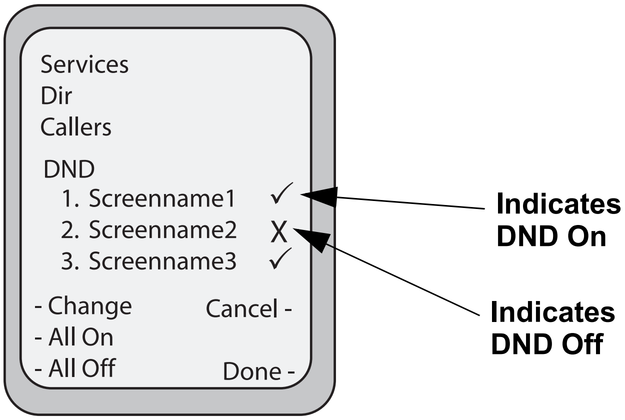
In the above example, Screenname1 and 3 have **DND ON** as indicated by a checkmark ( ✓). Screenname2 has DND off as indicated by an **X**. Items 4 and 5 allow you to disable or enable DND on all accounts, respectively.

You use the **CHANGE** key to enable or disable DND for a specific account. You use the **SET** key to enable/disable DND for all accounts. After making the change, you must press **DONE** and then **Confirm** (**#**) to save the change. Pressing **Cancel** (**0**) cancels the attempted change. The following screen displays after pressing a **DONE** key:



Apply Changes?
0 Cancel
# Confirm

## Aastra IP Phone UI

| Step | Action |
|---|---|
| ***DND in Custom Mode (continued)*** | |
| | **On the 55i, 57i, and 57i CT:**<br>Press the **DND** key on the phone. The screen displays a list of the accounts on the phone and allows you to enable/disable a specific account or all accounts. Use the UP and DOWN arrow keys to scroll through the accounts.<br> Services<br>Dir<br>Callers<br>DND<br>1. Screenname1 ✓<br>2. Screenname2 X<br>3. Screenname3 ✓<br>- Change<br>Cancel -<br>- All On<br>- All Off<br>Done -<br>**Indicates DND On**<br>**Indicates DND Off**<br>In the above example, Screenname1 and 3 have **DND ON** as indicated by a checkmark ( ✓). Screenname2 has DND off as indicated by an **X**. The **ALL ON** and **ALL OFF** softkeys allow you to enable or disable DND on all accounts, respectively.<br>You use the **CHANGE** key to enable or disable DND for a specific account selected. After making the change, you must press **DONE** to save the change. |

### *CFWD Account-Based Configuration*

Call Forward (CFWD) on the IP phone allows incoming calls to be forwarded to another destination.

Previous to Release 2.2, you could configure CFWD on all lines (global settings) or on specific lines (local settings) on the phone, using the IP Phone UI and the Aastra Web UI. You could configure call forwarding on the IP Phone UI on a global basis only using the Options Menu.

An Administrator or User can now configure CFWD on the phone-side by setting a mode for the phone to use (**Account**, **Phone**, or **Custom**). Once the mode is set, you can use the IP Phone UI to use the CFWD feature at *Options->Call Forward* or by pressing a configured Call Forward softkey/programmable key/extension module key.

The following describes the behavior for each CFWD mode.

- **Account mode** - The account mode allows you to configure CFWD on a per account basis. Pressing a configured CFWD key applies to the account in focus.
- **Phone mode** - The Phone mode allows you to set the same CFWD configuration for all accounts (**All**, **Busy**, and/or **No Answer**). When you configure the initial account, the phone applies the configuration to all other accounts. (In the Aastra Web UI, only the account you configured is enabled. All other accounts are grayed out but set to the same configuration.) Using the Aastra Web UI, if you make changes to that initial account, the changes apply to all accounts on the phone.
- **Custom mode** - The Custom mode allows you to configure CFWD for a specific account or all accounts. You can configure a specific mode (**All**, **Busy**, and/or **No Answer**) for each account independently or all accounts. On the 51 and 53i phones, you can set all accounts to **ALL On** or **ALL Off**. On the 55i, 57i, and 57i CT, you can set all accounts to **All On**, **All Off**, or copy the configuration for the account in focus to all other accounts using a **CopytoAll** softkey.

➡ **Note:** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to “Phone”.

In previous releases, you could configure one phone number and then select the current mode (All, Off, Busy, No Answer, Busy No Answer). In Release 2.2, you can enable different call forwarding rules/modes independently (for example, you can set different phone numbers for Busy, All, and NoAns modes and then turn them on/off individually).

The following table describes the key and Message Waiting Indicator (MWI) LEDs when you enable CFWD on the IP Phone.

| Key LED Behavior for All Modes | MWI LED Behavior for All Modes |
|---|---|
| **CFWD key LED** RED if CFWD All, CFWD Busy, or CFWD No Answer is enabled for the account in focus.<br>**CFWD key LED OFF** if any CFWD mode is disabled. | **MWI LED ON** if current account in focus has CFWD ALL enabled.<br>**MWI LED OFF** if CFWD All is disabled. |

You can enable/disable CFWD and set a CFWD key using the configuration files or the Aastra Web UI. You can set CFWD mode (**Account**, **Phone**, **Custom**) using the configuration files, Aastra Web UI or IP Phone UI.

### Important Notes

- In the configuration files, the new "**call forward key mode**" parameter listed in the section "Configuring CFWD Using the Configuration Files", is in addition to the previous call forward parameter (**call forward disabled**). You can still use the previous call forwarding parameter if desired in the configuration files.
- In the Aastra Web UI, the "Account Configuration" page replaces the previous "Call Forward Settings" page.
- In the IP Phone UI, the new CFWD feature has new menu screens at the path *Options->Call Forward* or by pressing a configured CFWD key.
- **If you make changes to the configuration for CFWD via the IP Phone UI, you must refresh the Aastra Web UI screen to see the changes.**

### *Configuring CFWD Using the Configuration Files*

You use the following parameters to set CFWD on the IP Phone using the configuration files:

- **call forward key mode**
- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **softkeyN states** (optional)

---

**Notes:**

**1.** If there is no CFWD key configured on the phone or it is removed, you can still set the CFWD modes via the IP Phone UI at the path *Options->Call Forward*.

**2.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to “Phone”.

**3.** When configuring a CFWD mode (**All**, **Busy**, **No Answer**) for an account, you must configure a CFWD number for that mode in order for the mode to be enabled.

| **Parameter –**<br>*call forward key mode* | **Aastra Web UI:** Basic Settings->Preferences->General<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Sets the mode for how the phone uses "call forwarding" (CFWD)<br>• **account**<br>The account mode allows you to configure CFWD on a per account basis. Pressing a configured CFWD key applies to the account in focus.<br>• **phone**<br>The Phone mode allows you to set the same CFWD configuration for all accounts (**All**, **Busy**, and/or **No Answer**). When you configure the initial account, the phone applies the configuration to all other accounts. (In the Aastra Web UI, only the account you configured is enabled. All other accounts are grayed out but set to the same configuration.) Using the Aastra Web UI, if you make changes to that initial account, the changes apply to all accounts on the phone.<br>• **custom**<br>The Custom mode allows you to configure CFWD for a specific account or all accounts. You can configure a specific mode (**All**, **Busy**, and/or **No Answer**) for each account independently or all accounts. On the 51 and 53i phones, you can set all accounts to **ALL On** or **ALL Off**. On the 55i, 57i, and 57i CT, you can set all accounts to **All On**, **All Off**, or copy the configuration for the account in focus to all other accounts using a **CopytoAll** softkey.<br><br>**Notes**:<br>**1.** If there is no CFWD key configured on the phone or it is removed, you can still set the CFWD modes via the IP Phone UI at the path *Options->Call Forward.*<br>**2.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to "Phone".<br>**3.** When configuring a CFWD mode (**All**, **Busy**, **No Answer**) for an account, you must configure a CFWD number for that mode in order for the mode to be enabled. |
| **Format** | Integer |
| **Default Value** | 0 (account) |
| **Range** | 0 (account)<br>1 (phone)<br>2 (custom) |
| **Example** | call forward key mode: 2 |

You use the following parameters to configure a CFWD key and number of rings:

- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **softkeyN states** (optional)

**Example**

The following is an example of configuring the mode for CFWD in the configuration files:

```
call forward key mode: 2
softkey1 type: call forward
softkey1 states: idle connected incoming outgoing busy
```

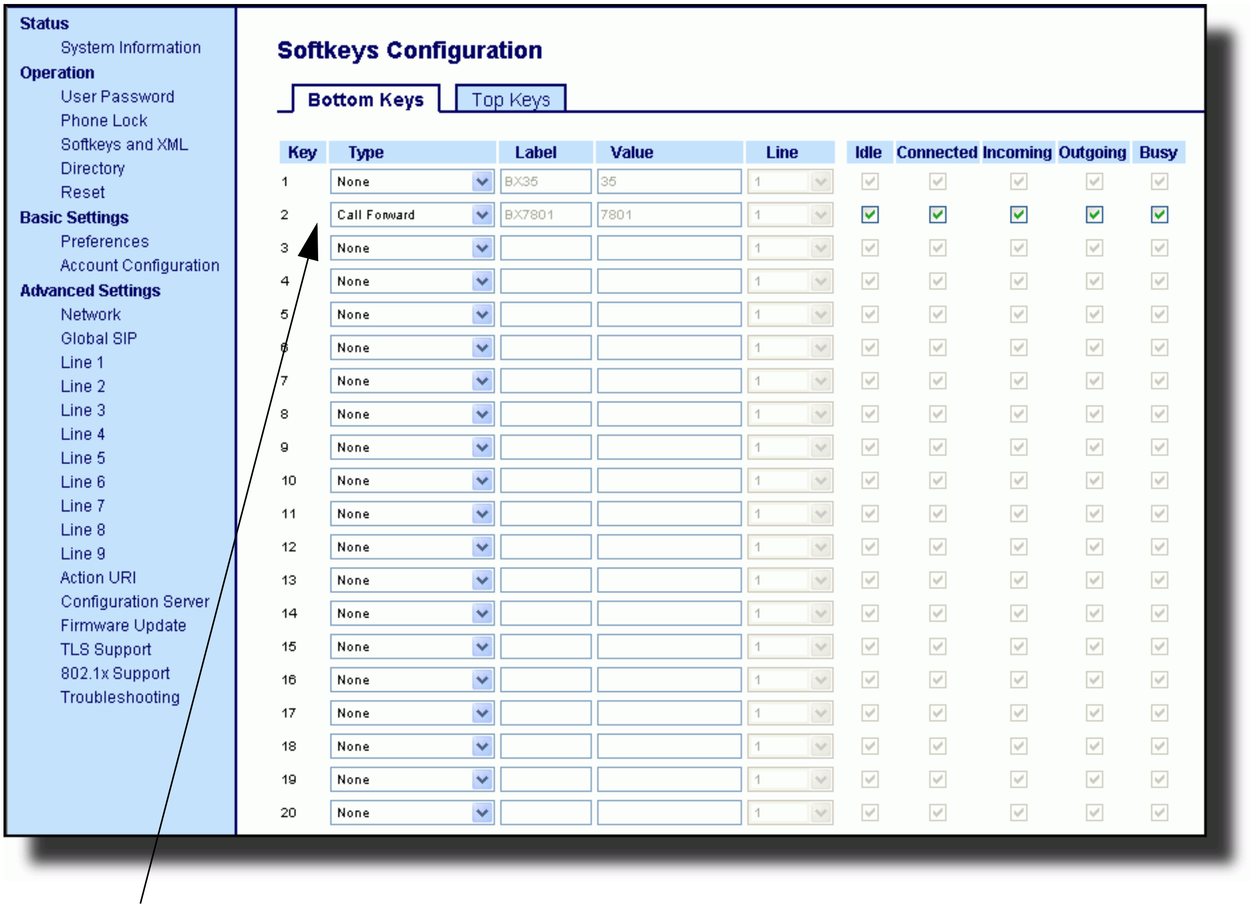
In the above example, softkey 1 is configured for CFWD on line 1 (account 1) with a "**custom**" configuration. Pressing softkey 1 displays CFWD screens for which you can customize on the phone. For specific screens that display in the IP Phone UI, see the section, "Using CFWD Modes via the IP Phone UI" on page 29.

### *Configuring CFWD Using the Aastra Web UI*

Use the following procedure to configure CFWD mode using the Aastra Web UI:

## Aastra Web UI

1 Click on **Operation->Softkeys and XML**;
or
Click on **Operation->Programmable Keys;**
or
Click on **Operation->Expansion Module**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Bottom Keys
Top Keys

**Softkeys Configuration**

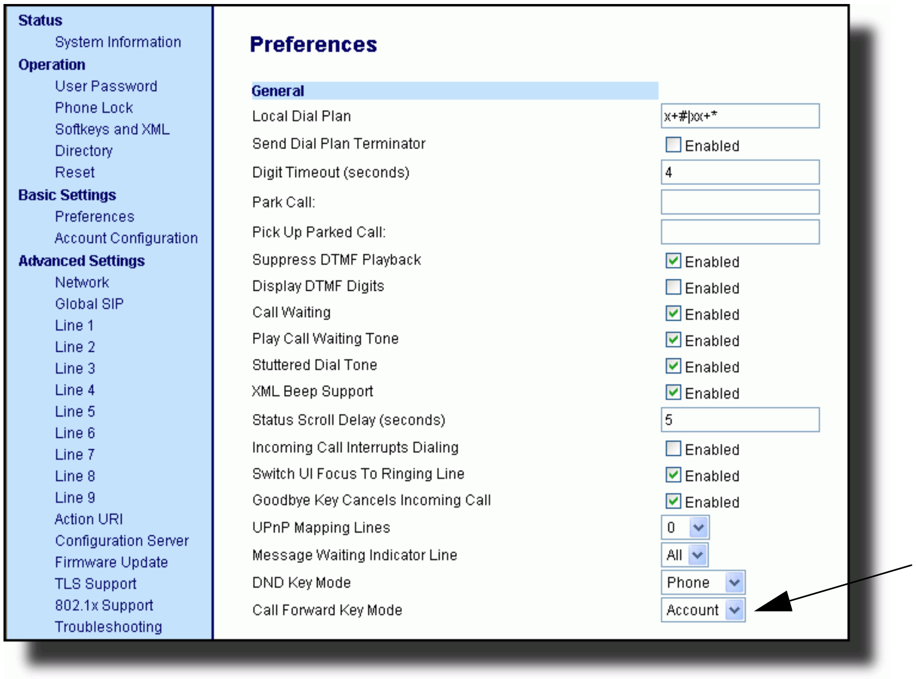
| Key | Type | Label | Value | Line | Idle | Connected | Incoming | Outgoing | Busy |
|---|---|---|---|---|---|---|---|---|---|
| 1 | None | BX35 | 35 | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 2 | Call Forward | BX7801 | 7801 | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 3 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 4 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 5 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 6 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 7 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 8 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 9 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 10 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 11 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 12 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 13 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 14 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 15 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 16 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 17 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 18 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 19 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 20 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |

**Softkey 2 configured for CFWD**

2 Click **Save Settings** to save your changes.

## Aastra Web UI

3 Click on **Basic Settings->Preferences->General.**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Preferences**

**General**

| | |
|---|---|
| Local Dial Plan | x+#\|xx+* |
| Send Dial Plan Terminator | ☐ Enabled |
| Digit Timeout (seconds) | 4 |
| Park Call: | |
| Pick Up Parked Call: | |
| Suppress DTMF Playback | ☑ Enabled |
| Display DTMF Digits | ☐ Enabled |
| Call Waiting | ☑ Enabled |
| Play Call Waiting Tone | ☑ Enabled |
| Stuttered Dial Tone | ☑ Enabled |
| XML Beep Support | ☑ Enabled |
| Status Scroll Delay (seconds) | 5 |
| Incoming Call Interrupts Dialing | ☐ Enabled |
| Switch UI Focus To Ringing Line | ☑ Enabled |
| Goodbye Key Cancels Incoming Call | ☑ Enabled |
| UPnP Mapping Lines | 0 |
| Message Waiting Indicator Line | All |
| DND Key Mode | Phone |
| Call Forward Key Mode | Account |

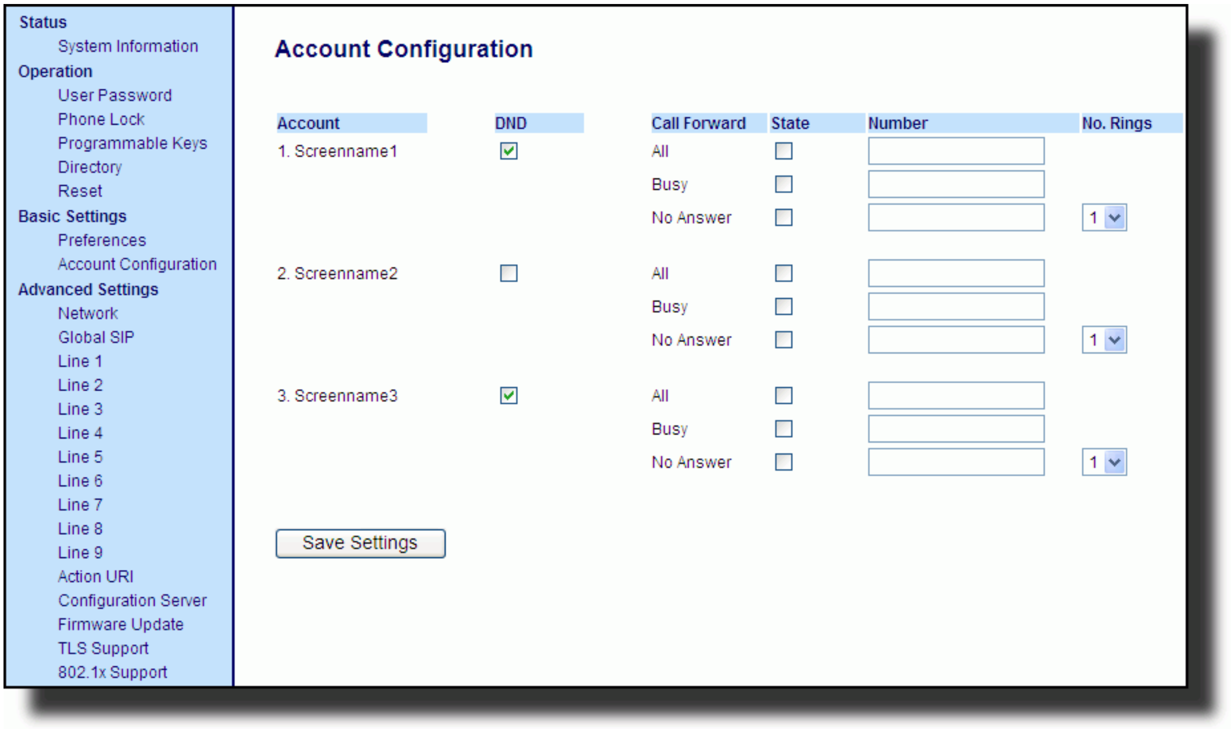
**Call Forward Key Mode Parameter**

**Note:** If there is no CFWD key configured on the phone or it is removed, you can still set the CFWD modes via the IP Phone UI at the path *Options->Call Forward.*

| **Aastra Web UI** | |
|---|---|
| 4 | In the “**Call Forward Key Mode**” field, select a call forward mode to use on the phone.<br>Valid values are: Account, Phone, Custom. Default is **Account**.<br>• **account**<br>The account mode allows you to configure CFWD on a per account basis. Pressing a configured CFWD key applies to the account in focus.<br>• **phone**<br>The Phone mode allows you to set the same CFWD configuration for all accounts (**All**, **Busy**, and/or **No Answer**). When you configure the initial account, the phone applies the configuration to all other accounts. (In the Aastra Web UI, only the account you configured is enabled. All other accounts are grayed out but set to the same configuration.) Using the Aastra Web UI, if you make changes to that initial account, the changes apply to all accounts on the phone.<br>• **custom**<br>The Custom mode allows you to configure CFWD for a specific account or all accounts. You can configure a specific state (**All**, **Busy**, and/or **No Answer**) for each account independently or all accounts. On the 51 and 53i phones, you can set all accounts to **ALL On** or **ALL Off**. On the 55i, 57i, and 57i CT, you can set all accounts to **All On**, **All Off**, or copy the configuration for the account in focus to all other accounts using a **CopytoAll** softkey.<br>**Notes**:<br>**1.** If there is no CFWD key configured on the phone or it is removed, you can still set the CFWD modes via the IP Phone UI at the path *Options->Call Forward.*<br>**2.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to “Phone”.<br>**3.** When configuring a CFWD state (**All**, **Busy**, **No Answer**) for an account, you must configure a CFWD number for that state in order for the state to be enabled. |
| 5 | Click Save Settings to save your changes.<br>The change takes effect immediately without a reboot. |

## Aastra Web UI

6 Click on **Basic Settings->Account Configuration**..


Status
System Information
Operation
User Password
Phone Lock
Programmable Keys
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Save Settings

**Account Configuration**

| Account | DND | Call Forward | State | Number | No. Rings |
|---|---|---|---|---|---|
| 1. Screenname1 | ☑ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |
| 2. Screenname2 | ☐ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |
| 3. Screenname3 | ☑ | All | ☐ | | |
| | | Busy | ☐ | | |
| | | No Answer | ☐ | | 1 |

7 For each account, enable CFWD state by placing a check mark in one or more of the following "**State**" fields:

- **All**
- **Busy**
- **No Answer**

The "**All**" option forwards all incoming calls for this account to the specified phone number regardless of the state of the phone. The phone can be in the Busy or No Answer states, or can be in the idle state. The phone still forwards all calls to the specified number.
The "**Busy**" option call forwards incoming calls only if the account is in the busy state. The calls are forwarded to the specified phone number.
The "**No Answer**" option call forwards incoming calls only if the account rings but is not answered in the defined number of rings. The call gets forwarded to the specified number.

**Note:** You can use the "**Busy**" and "**No Answer**" states together using different forwarding phone numbers. If these states are enabled for an account (the "**All**" state is disabled), and the phone is in the busy state when a call comes in, the phone can forward the call to the specified phone number (for example, voicemail). If there is no answer on the phone after the specified number of rings, the phone can forward the call to a different specified number, such as a cell phone number.

| | Aastra Web UI |
|---|---|
| 8 | For each account, in the "**Number**" field, enter the phone number for which you want the incoming calls to forward to if the phone is in the specified state.<br>If using the "**Account**" mode or "**Custom**" mode, you can enter different phone numbers for each account.<br>**Notes**:<br>**1.** If you selected "**Account**" mode in step 4, you can enable/disable each account or all accounts as applicable. You can enter different phone number for each enabled state.<br>If you selected "**Custom**" mode, you can enable/disable each account or all accounts as applicable. You can enter different phone numbers for each enabled state.<br>If you selected "**Phone**" mode, all accounts are set to the same CFWD configuration (**All**, **Busy**, and/or **No Answer**) as Account 1 on the phone. (In the Aastra Web UI, only Account 1 is enabled. All other accounts are grayed out but use the same configuration as Account 1.)<br>Using the Aastra Web UI, if you make changes to Account 1, the changes apply to all accounts on the phone. Using the IP Phone UI, if you make changes to any other account other then Account 1, the changes also apply to all accounts on the phone. When enabling a CFWD state, you must specify a phone number for the phone to CFWD to. The number you specify applies to all accounts of the same mode.<br>**2.** Number and name of accounts that display to this screen are dependant on the number and name of accounts configured on the phone. In the screen in step 6, Screenname1 is configured on Line 1, Screenname2 is configured on Line 2, and Screenname3 is configured on Line 3. The name for the account is dependant on the name specified for the "**Screen Name**" parameter at the path **Advanced Settings->LineN**. If you do not specify a value for the "Screen Name" parameter, the account name is based on the "**Phone Number**" parameter at the path **Advanced Settings->LineN**. If neither the "Screen Name" nor the "Phone Number" parameters are specified, the account name shows "1", "2", "3", etc. only. |
| 9 | For the **No Answer** state, in the "**No. Rings**" field, enter the number of times that the account rings before forwarding the call to the specified number. Valid values are 1 through 20. Default is 1.<br>**Note:** When using the "**Account**" mode or "**Custom**" mode, you can enter a different number of rings for each account. If you use the Aastra Web UI to change the Call Forward Key Mode to "**Phone**", all accounts synchronize to Account 1. |
| 10 | Click Save Settings to save your changes.<br>The change takes effect immediately without a reboot. |

### *Using CFWD Modes via the IP Phone UI*

If you enable/disable CFWD using the configuration files or the Aastra Web UI, you can use the CFWD screens that display to the IP Phone UI. You can access the CFWD parameters by pressing a configured CFWD key (if previously configured) OR by pressing *Options->Call Forward* on the phone's front panel.

The following procedure assumes you have already configured a CFWD key AND assumes there are three accounts configured on the phone.

**Notes:**

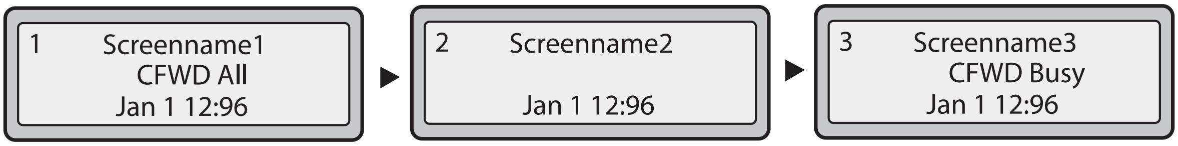
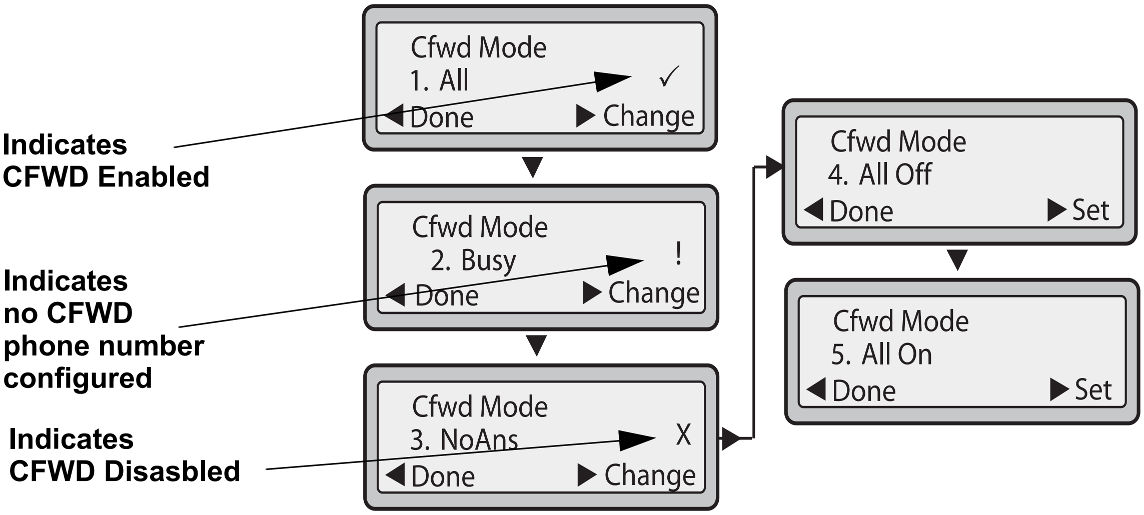
**1.** If there is no CFWD key configured on the phone or it is removed, you can still enable CFWD via the IP Phone UI at the path *Options->Call Forward*.

**2.** If there is only one account configured on the phone, then the mode setting is ignored and the phone behaves as if the mode was set to "Phone".

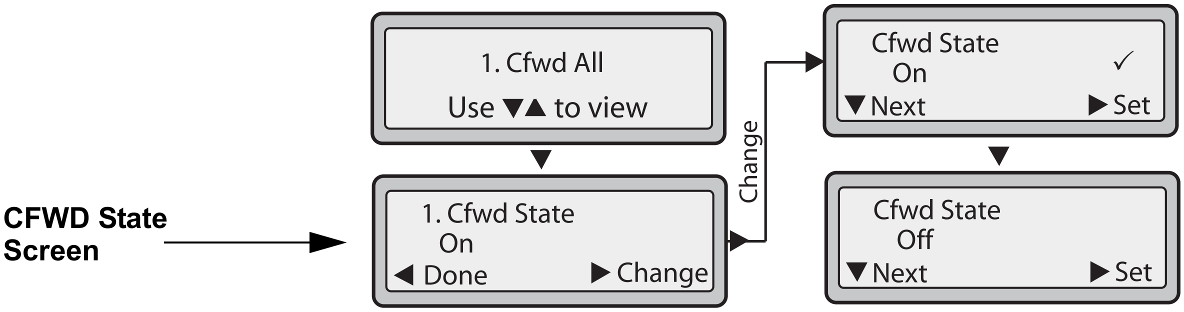
**3.** Using the Aastra Web UI, if you change the CFWD key mode to "**Phone**", all accounts synchronize to the current setting of Account 1.

.

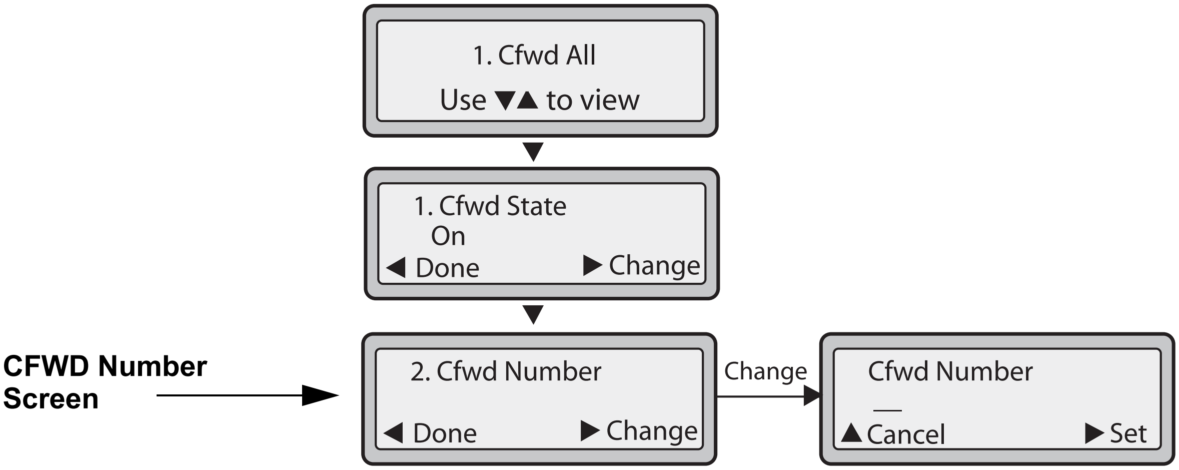
## Aastra IP Phone UI

| Step | Action |
|---|---|
| ***CFWD in Account Mode (51i and 53i)*** | |
| 1 | Use the **RIGHT** and **LEFT** arrow keys to scroll through each account.<br><br> 1 Screenname1<br>CFWD All<br>Jan 1 12:96<br>2 Screenname2<br>Jan 1 12:96<br>3 Screenname3<br>CFWD Busy<br>Jan 1 12:96<br>In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Screenname1 has "**CFWD All**" enabled, Screenname 2 has CFWD disabled as indicated by no message displayed, and Screenname3 has "**CFWD Busy**" enabled. |
| 2 | Press the **Call Forward** key. The Call Forward Mode screen displays. Use the **UP** and **DOWN** arrow keys to scroll through each state type.<br><br> Cfwd Mode<br>1. All ✓<br>◀ Done ▶ Change<br>Indicates CFWD Enabled<br>Cfwd Mode<br>2. Busy !<br>◀ Done ▶ Change<br>Indicates no CFWD phone number configured<br>Cfwd Mode<br>3. NoAns X<br>◀ Done ▶ Change<br>Indicates CFWD Disasbled<br>Cfwd Mode<br>4. All Off<br>◀ Done ▶ Set<br>Cfwd Mode<br>5. All On<br>◀ Done ▶ Set<br>In the above example, **CFWD All** is enabled as indicated by a checkmark ( ✓), **CFWD Busy** is enabled but no call forward phone number configured as indicated by a **!**, and **CFWD NoAns** is disabled, as indicated by an **X.** |

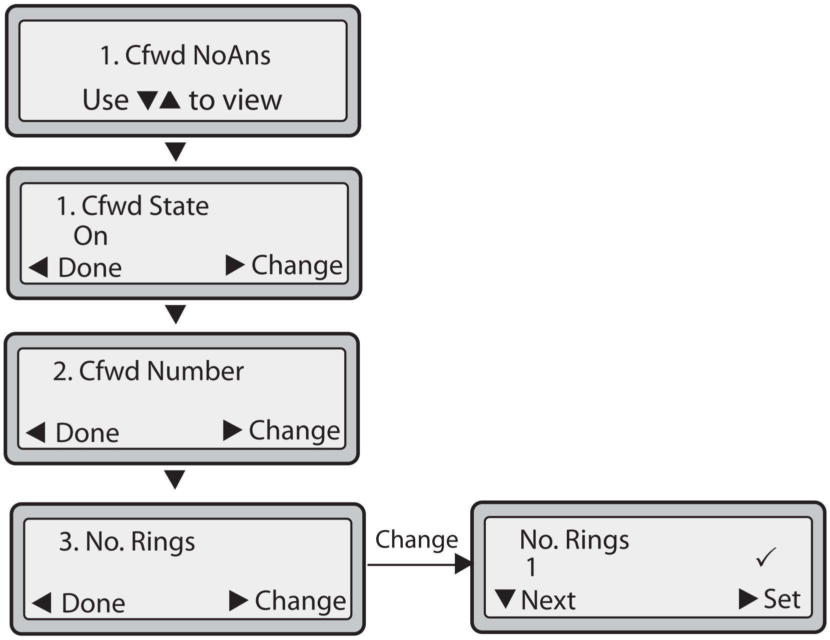
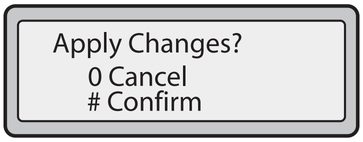
**Aastra IP Phone UI**

| Step | Action |
|---|---|
| 3 | Select a state for the account(s) in focus using the **UP** and **DOWN** arrow keys.<br>You can enable/disable any or all of the following states for an account:<br>• **All** - Enables **CFWD All** for an account and forwards all incoming calls for that account, to the specified number.<br>• **Busy** - Enables **CFWD Busy** for an account and forwards incoming calls to a specified number if DND has been enabled for that account OR if the account is currently engaged in another call.<br>• **No Answer** - Enables **CFWD NoAns** for an account and forwards incoming calls to a specified number if the call has not been answered for the specified number of rings.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off -** Disables all CFWD states for the current account in focus.<br>**All On** - Enables all CFWD states for the current account in focus. |
| 4 | Press the **CHANGE** key for the state you selected in step 3. Scroll to the CFWD State screen. This displays the current state of the mode you selected. In the following example, the CFWD All state is ON..<br><br> CFWD State Screen<br>1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>Change<br>Cfwd State<br>On<br>✓<br>▼Next<br>▶ Set<br>Cfwd State<br>Off<br>▼Next<br>▶ Set |
| 5 | Press the **CHANGE** key in the CFWD State screen. Press **NEXT** to toggle the state of the CFWD mode ON or OFF. In the example in Step 4, you press **NEXT** to change the option to **OFF**. |
| 6 | Press the **SET** key to save the change. |

**Aastra IP Phone UI**

| Step | Action |
|---|---|
| 7 | In the CFWD State screen, press the **DOWN** arrow key to scroll to the CFWD Number screen and press **CHANGE**.<br><br> 1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>CFWD Number Screen<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>Change<br>Cfwd Number<br>▲Cancel<br>▶ Set |
| 8 | Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify. |
| 9 | Press **SET** to save the change. |

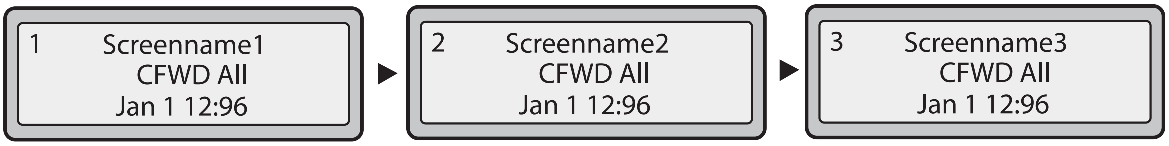
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 10 | For the **CFWD No Answer** state, In the CFWD Number screen, press the **DOWN** arrow key to scroll to the CFWD No. Rings screen and press **CHANGE**.<br>**CFWD No. Rings Screen**<br> 1. Cfwd NoAns<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>3. No. Rings<br>◀ Done<br>▶ Change<br>Change<br>No. Rings<br>1<br>✓<br>▼ Next<br>▶ Set |
| 11 | Press the **NEXT** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call if there is no answer. |
| 12 | Press **SET** to save the change. |
| 13 | Press **DONE** to save CFWD All Number, CFWD All State, CFWD Busy Number, CFWD Busy State, CFWD No Answer Number, CFWD No Answer State, CFWD No Answer Rings.<br>Each time you press **DONE**, the following “Apply Changes” screen displays.<br> Apply Changes?<br>0 Cancel<br># Confirm |

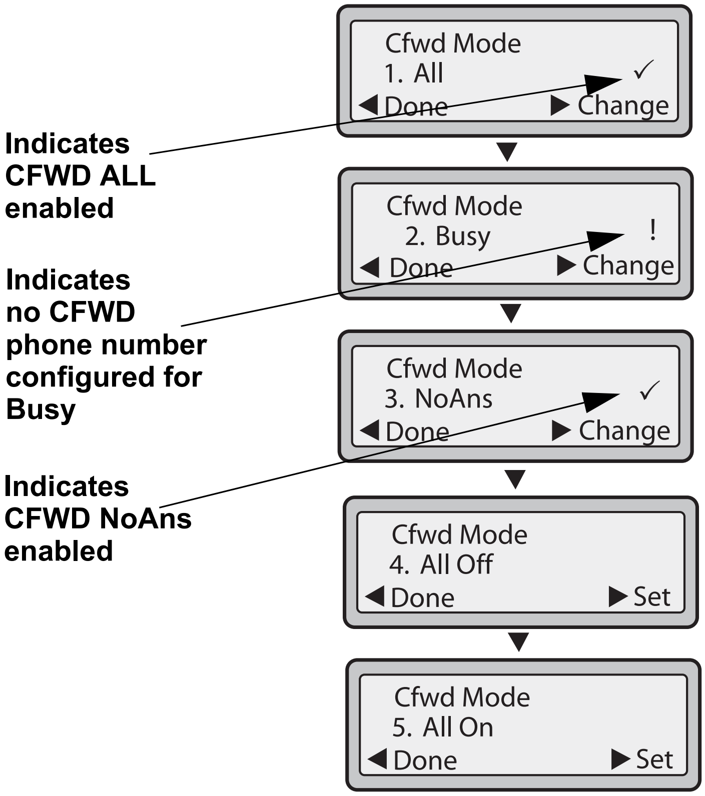
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 14 | Press **#** to confirm the change(s) each time the “Apply Changes” screen displays.<br>All changes are saved to the phone. |

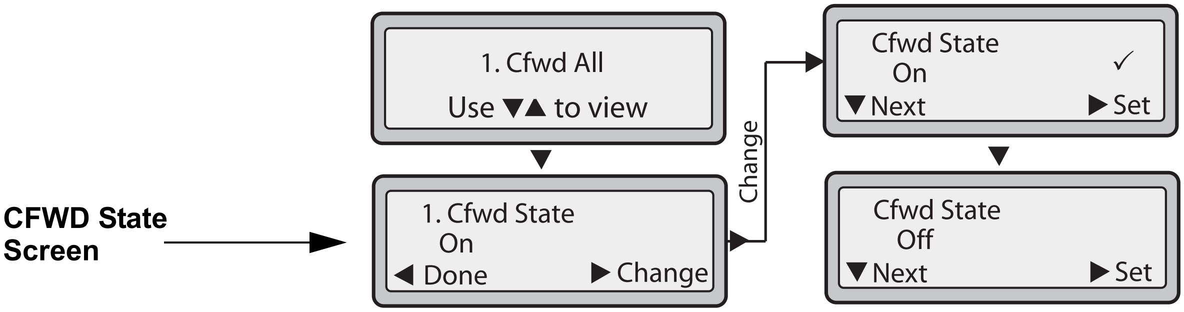
**Aastra IP Phone UI**

| Step | Action |
|---|---|
| ***CFWD in Phone Mode (51i and 53i)*** | |
| 1 | Use the **RIGHT** and **LEFT** arrow keys to scroll through each account.<br><br>1 Screenname1<br>CFWD All<br>Jan 1 12:96<br>2 Screenname2<br>CFWD All<br>Jan 1 12:96<br>3 Screenname3<br>CFWD All<br>Jan 1 12:96<br>In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. All three accounts have CFWD enabled as indicated by the "**CFWD All**" message.<br>**Note: In "Phone" mode, when you change the call forward configuration for an account, the change applies to all accounts.** |

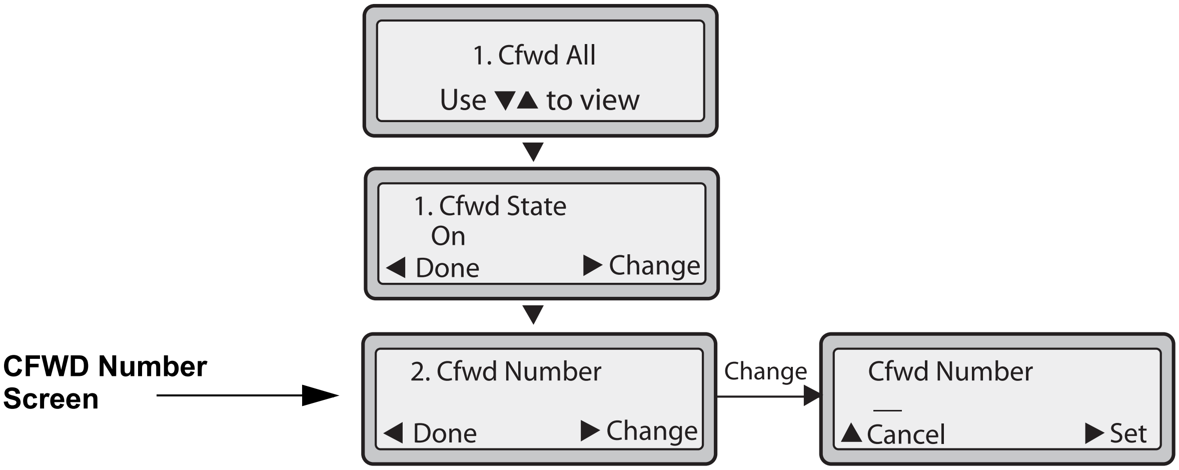
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 2 | Press the **Call Forward** key. The Call Forward Mode screen displays. Use the **UP** and **DOWN** arrow keys to scroll through each state type.<br><br> Cfwd Mode<br>1. All ✓<br>◀ Done ▶ Change<br>Cfwd Mode<br>2. Busy !<br>◀ Done ▶ Change<br>Cfwd Mode<br>3. NoAns ✓<br>◀ Done ▶ Change<br>Cfwd Mode<br>4. All Off<br>◀ Done ▶ Set<br>Cfwd Mode<br>5. All On<br>◀ Done ▶ Set<br>Indicates CFWD ALL enabled<br>Indicates no CFWD phone number configured for Busy<br>Indicates CFWD NoAns enabled<br>In the above example, the account has **CFWD All** and **CFWD NoAns** enabled as indicated by a checkmark ( ✓). The **CFWD Busy** setting is enabled but no call forward phone number is configured as indicated by a **!** |

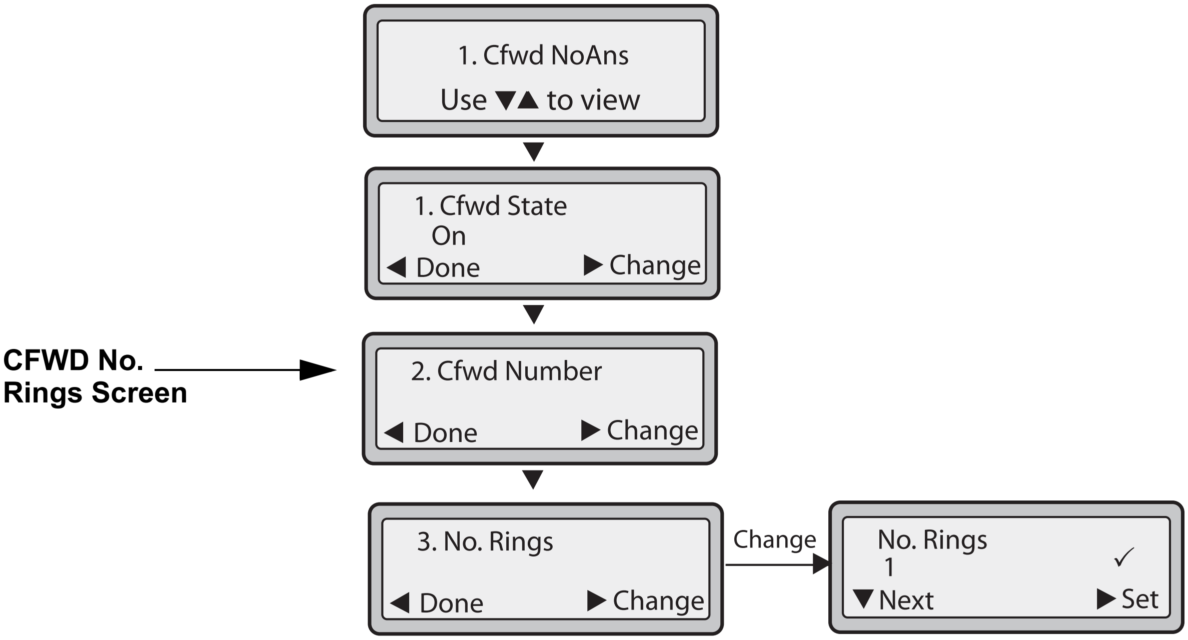
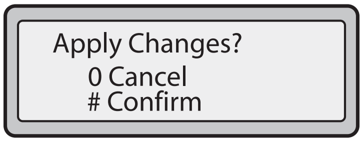
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 3 | Select a state using the **UP** and **DOWN** arrow keys.<br>You can enable/disable a specific account on the phone with any or all of the following states. However, the configuration you set will apply to all accounts on the phone.<br>• **All** - Enables **CFWD All** on the phone and forwards all incoming calls to the specified number.<br>• **Busy** - Enables **CFWD Busy** on the phone and forwards incoming calls to a specified number if DND has been enabled OR if the phone is currently engaged in another call.<br>• **No Answer** - Enables **CFWD NoAns** on the phone and forwards incoming calls to a specified number if the call has not been answered for the specified number of rings.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off** - Disables all CFWD states for the phone.<br>**All On** - Enables all CFWD states for the phone.<br>**Note: In "Phone" mode, the initial configuration you set for an account applies to all the accounts on the phone.** |
| 4 | Press the **CHANGE** key for the mode you selected in step 2. Scroll to the CFWD State screen. This displays the current state of the mode you selected. In the following example, the CFWD All state is ON..<br><br> CFWD State Screen<br>1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>Change<br>Cfwd State<br>On<br>✓<br>▼Next<br>▶ Set<br>Cfwd State<br>Off<br>▼Next<br>▶ Set |

## Aastra IP Phone UI

| Step | Action |
|---|---|
| 5 | Press the **CHANGE** key in the CFWD State screen. Press **NEXT** to toggle the state of the CFWD state ON or OFF. In the example in Step 4, you press **NEXT** to change the option to **OFF**. |
| 6 | Press the **SET** key to save the change. |
| 7 | In the CFWD State screen, press the **DOWN** arrow key to scroll to the CFWD Number screen and press **CHANGE**.<br><br> 1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>CFWD Number Screen<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>Change<br>Cfwd Number<br>▲Cancel<br>▶ Set |
| 8 | Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify. |
| 9 | Press **SET** to save the change. |

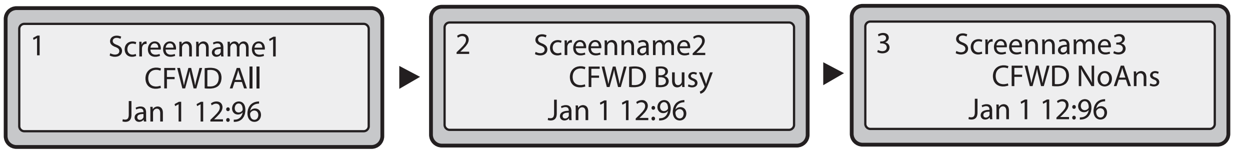
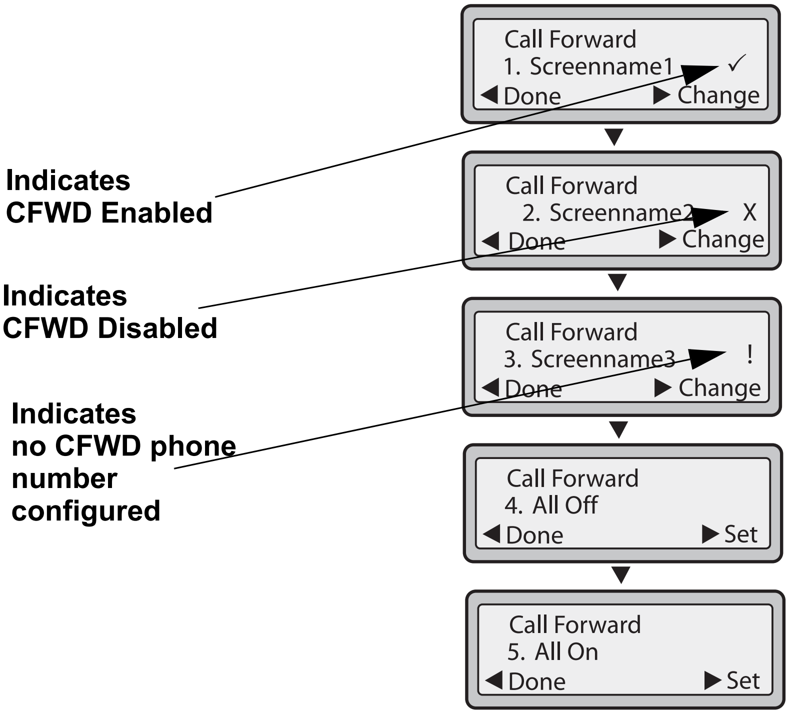
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 10 | For the **CFWD No Answer** state, in the CFWD Number screen, press the **DOWN** arrow key to scroll to the CFWD No. Rings screen and press **CHANGE**.<br><br> 1. Cfwd NoAns<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>3. No. Rings<br>◀ Done<br>▶ Change<br>Change<br>No. Rings<br>1<br>✓<br>▼Next<br>▶ Set<br>**CFWD No. Rings Screen** |
| 11 | Press the **NEXT** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call. |
| 12 | Press **SET** to save the change. |
| 13 | Press **DONE** to save CFWD All Number, CFWD All State, CFWD Busy Number, CFWD Busy State, CFWD No Answer Number, CFWD No Answer State, CFWD No Answer Rings.<br>Each time you press **DONE**, the following “Apply Changes” screen displays.<br><br>Apply Changes?<br>0 Cancel<br># Confirm |

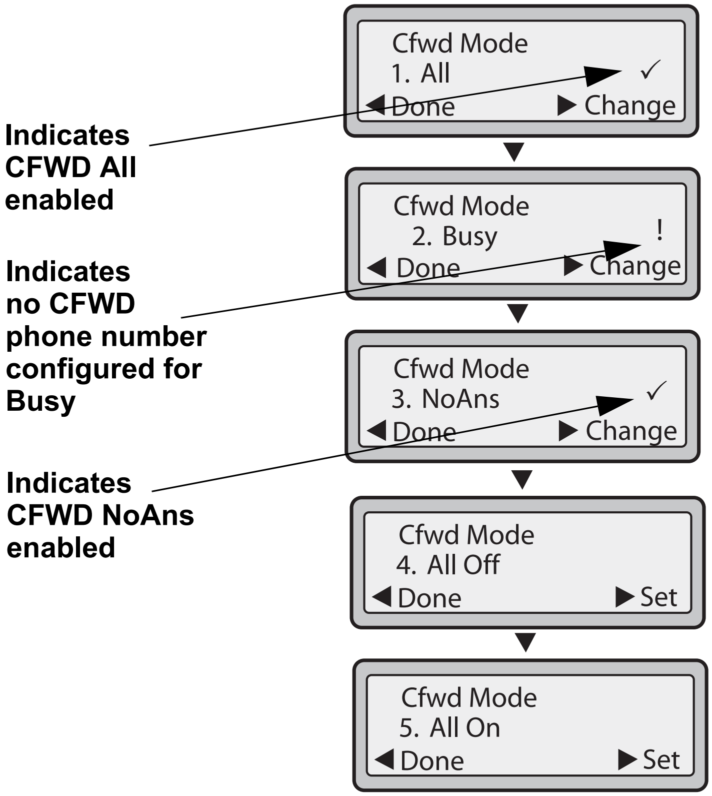
**Aastra IP Phone UI**

| Step | Action |
|---|---|
| 14 | Press **#** to confirm the change(s) each time the “Apply Changes” screen displays.<br>All the same changes are saved to all accounts on the phone. |

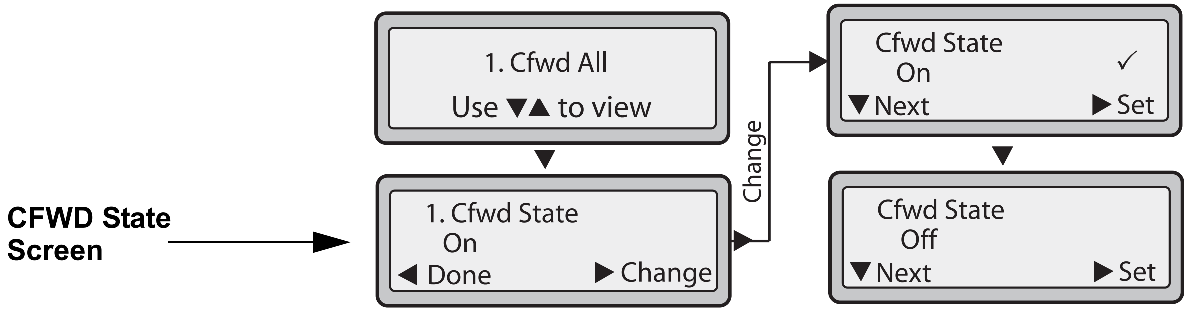
## Aastra IP Phone UI

| Step | Action |
|---|---|
| ***CFWD in Custom Mode (51i and 53i)*** | |
| 1 | Use the **RIGHT** and **LEFT** arrow keys to scroll through each account.<br><br> 1 Screenname1 CFWD All Jan 1 12:96<br>2 Screenname2 CFWD Busy Jan 1 12:96<br>3 Screenname3 CFWD NoAns Jan 1 12:96<br>In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. All three accounts have CFWD enabled as indicated by the "**CFWD All**", "**CFWD Busy**", and "**CFWD NoAns**" messages.<br>Press the **Call Forward** key. The CFWD Account screens display. Use the **UP** and **DOWN** arrow keys to scroll through each account.<br><br> Call Forward 1. Screenname1 ✓ ◀Done ▶Change<br>Call Forward 2. Screenname2 X ◀Done ▶Change<br>Call Forward 3. Screenname3 ! ◀Done ▶Change<br>Call Forward 4. All Off ◀Done ▶Set<br>Call Forward 5. All On ◀Done ▶Set<br>Indicates CFWD Enabled<br>Indicates CFWD Disabled<br>Indicates no CFWD phone number configured<br>In the above example, Screenname1 has one or more CFWD states enabled as indicated by a checkmark ( ✓). Screenname2 has one or more CFWD states disabled as indicated by an **X**. Screenname3 has one or more CFWD states configured but a specific state has no call forward phone number configured as indicated by a **!**. Items 4 and 5 allow you to disable or enable CFWD on all accounts, respectively. |

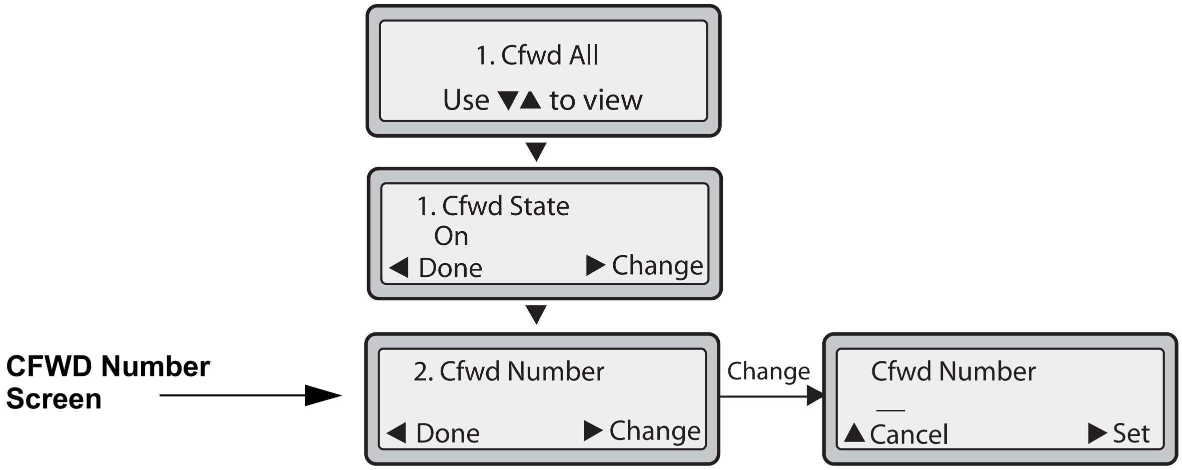
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 2 | Select an account to configure. Press the **CHANGE** key. The CFWD Mode screen displays. Use the **UP** and **DOWN** arrow keys to scroll through each state screen..<br><br> Indicates CFWD All enabled<br>Indicates no CFWD phone number configured for Busy<br>Indicates CFWD NoAns enabled<br>Cfwd Mode<br>1. All ✓<br>◀ Done ▶ Change<br>Cfwd Mode<br>2. Busy !<br>◀ Done ▶ Change<br>Cfwd Mode<br>3. NoAns ✓<br>◀ Done ▶ Change<br>Cfwd Mode<br>4. All Off<br>◀ Done ▶ Set<br>Cfwd Mode<br>5. All On<br>◀ Done ▶ Set<br>In the above example, the account has **CFWD All** and **CFWD NoAns** enabled as indicated by a checkmark ( ✓). The **CFWD Busy** setting is enabled for the account but has no call forward phone number configured as indicated by a **!**. |

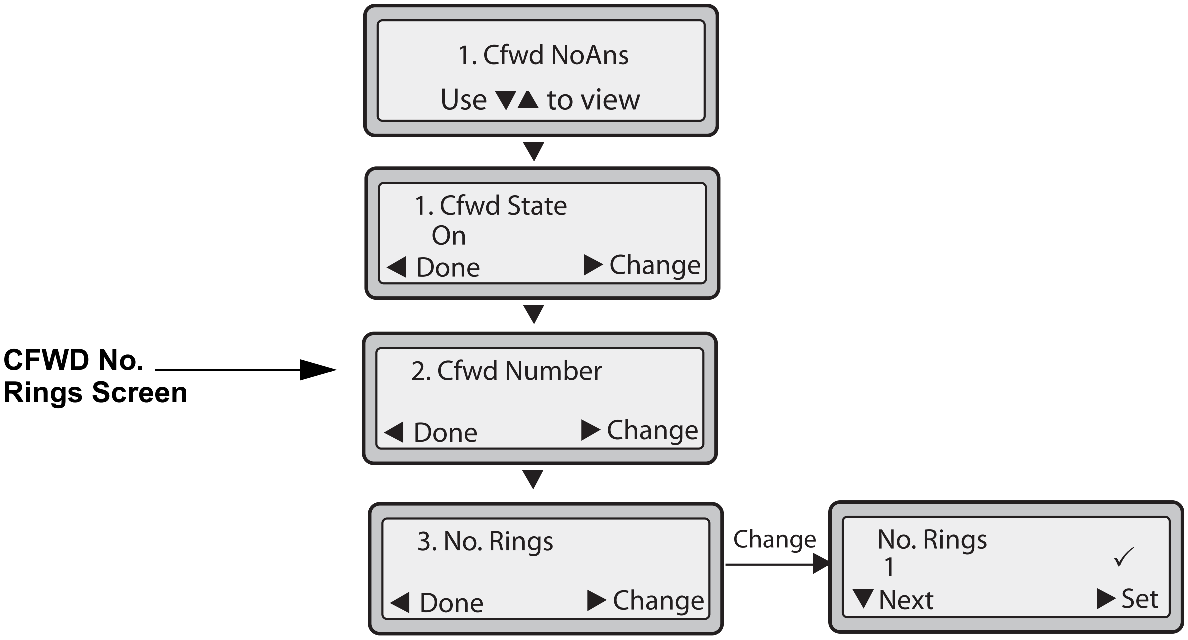
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 3 | Select a state for the account(s) in focus using the **UP** and **DOWN** arrow keys.<br>You can enable/disable any or all of the following states for a specific account or for all accounts (with individual configurations):<br>• **All** - Enables **CFWD All** for an account and forwards all incoming calls for that account, to the specified number. The phone number can be different between accounts.<br>• **Busy** - Enables **CFWD Busy** for an account and forwards incoming calls to a specified number if DND has been enabled for that account OR if that account is currently engaged in another call. The phone number can be different between accounts.<br>• **No Answer** - Enables **CFWD NoAns** for an account and forwards incoming calls to a specified number if the call has not been answered for a specified number of rings. The phone number can be different between accounts.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off** - Disables all CFWD states for the current account in focus or all accounts.<br>**All On** - Enables all CFWD states for the current account in focus or all accounts. |
| 4 | Press the **CHANGE** key for the mode you selected in step 2. Scroll to the CFWD State screen. This displays the current state of the mode you selected. In the following example, the CFWD All state is ON..<br> CFWD State Screen<br>1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>Change<br>Cfwd State<br>On<br>✓<br>▼Next<br>▶ Set<br>Cfwd State<br>Off<br>▼Next<br>▶ Set |

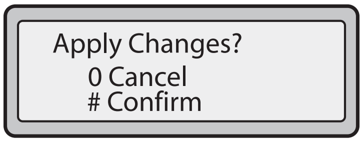
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 5 | Press the **CHANGE** key in the CFWD State screen. Press **NEXT** to toggle the state of the CFWD state ON or OFF. In the example in Step 4, you press **NEXT** to change the option to **OFF**. |
| 6 | Press the **SET** key to save the change. |
| 7 | In the CFWD State screen, press the **DOWN** arrow key to scroll to the CFWD Number screen and press **CHANGE**.<br><br> CFWD Number Screen<br>1. Cfwd All<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>Change<br>Cfwd Number<br>▲Cancel<br>▶ Set |
| 8 | Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify. |
| 9 | Press **SET** to save the change. |

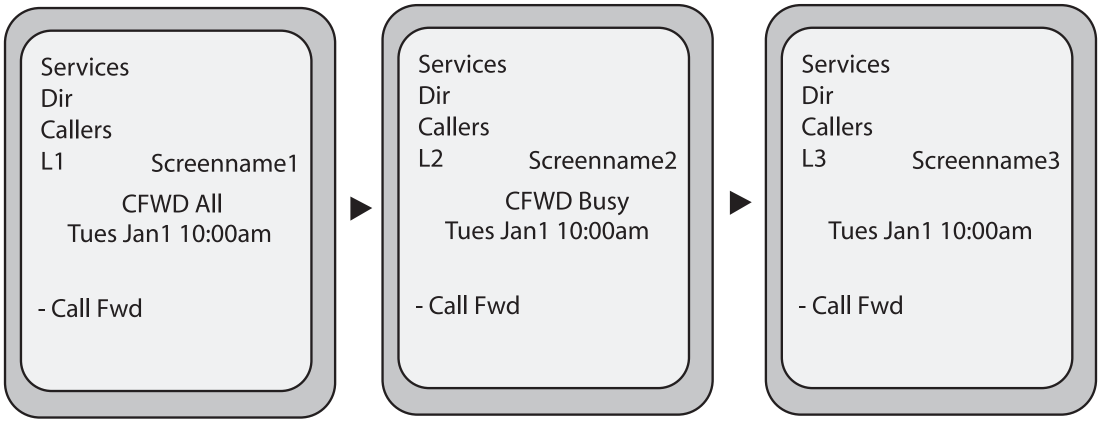
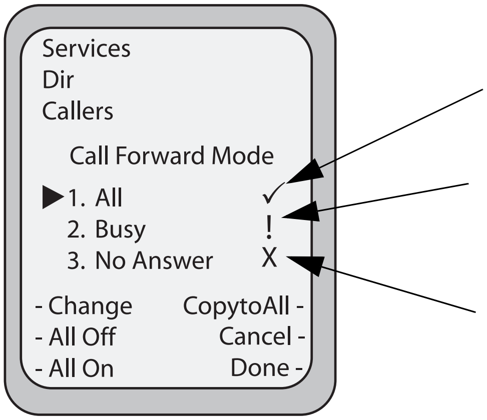
**Aastra IP Phone UI**

| Step | Action |
|---|---|
| 10 | For the **CFWD No Answer** state, in the CFWD Number screen, press the **DOWN** arrow key to scroll to the CFWD No. Rings screen and press **CHANGE**.<br> 1. Cfwd NoAns<br>Use ▼▲ to view<br>1. Cfwd State<br>On<br>◀ Done<br>▶ Change<br>CFWD No. Rings Screen<br>2. Cfwd Number<br>◀ Done<br>▶ Change<br>3. No. Rings<br>◀ Done<br>▶ Change<br>Change<br>No. Rings<br>1<br>✓<br>▼ Next<br>▶ Set |
| 11 | Press the **NEXT** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call. |
| 12 | Press **SET** to save the change. |

## Aastra IP Phone UI

| Step | Action |
|---|---|
| 13 | Press **DONE** to save CFWD All Number, CFWD All State, CFWD Busy Number, CFWD Busy State, CFWD No Answer Number, CFWD No Answer State, CFWD No Answer Rings.<br>Each time you press **DONE**, the following “Apply Changes” screen displays.<br><br>Apply Changes?<br>0 Cancel<br># Confirm |
| 14 | Press **#** to confirm the change(s) each time the “Apply Changes” screen displays.<br>All changes are saved to the phone for all accounts. |

## Aastra IP Phone UI

| Step | Action |
|---|---|
| ***CFWD in Account Mode (55i, 57i, and 57i CT)*** | |
| 1 | Use the **RIGHT** and **LEFT** arrow keys to scroll through each account.<br><br>Services<br>Dir<br>Callers<br>L1 Screenname1<br>CFWD All<br>Tues Jan1 10:00am<br>- Call Fwd<br>▶<br>Services<br>Dir<br>Callers<br>L2 Screenname2<br>CFWD Busy<br>Tues Jan1 10:00am<br>- Call Fwd<br>▶<br>Services<br>Dir<br>Callers<br>L3 Screenname3<br>Tues Jan1 10:00am<br>- Call Fwd<br>In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Screenname1 has "**CFWD All**" enabled, Screenname2 has "**CFWD Busy**" enabled, and Screenname3 has CFWD disabled as indicated by no message displayed. |
| 2 | Ppress the **Call Forward** key. The Call Forward Mode screen displays for the account you selected. Use the **UP** and **DOWN** arrow keys to scroll through each state type.<br>**Call Forward Mode Screen**<br><br>Services<br>Dir<br>Callers<br>Call Forward Mode<br>▶1. All ✓<br>2. Busy !<br>3. No Answer X<br>- Change CopytoAll -<br>- All Off Cancel -<br>- All On Done -<br>**Indicates CFWD Enabled**<br>**Indicates no CFWD phone number configured**<br>**Indicates CFWD Disabled**<br>In the above example, **CFWD All** is enabled as indicated by a checkmark ( ✓), **CFWD Busy** is enabled but no call forward phone number is configured as indicated by a **!**, and **CFWD NoAns** is disabled as indicated by an **X.** |

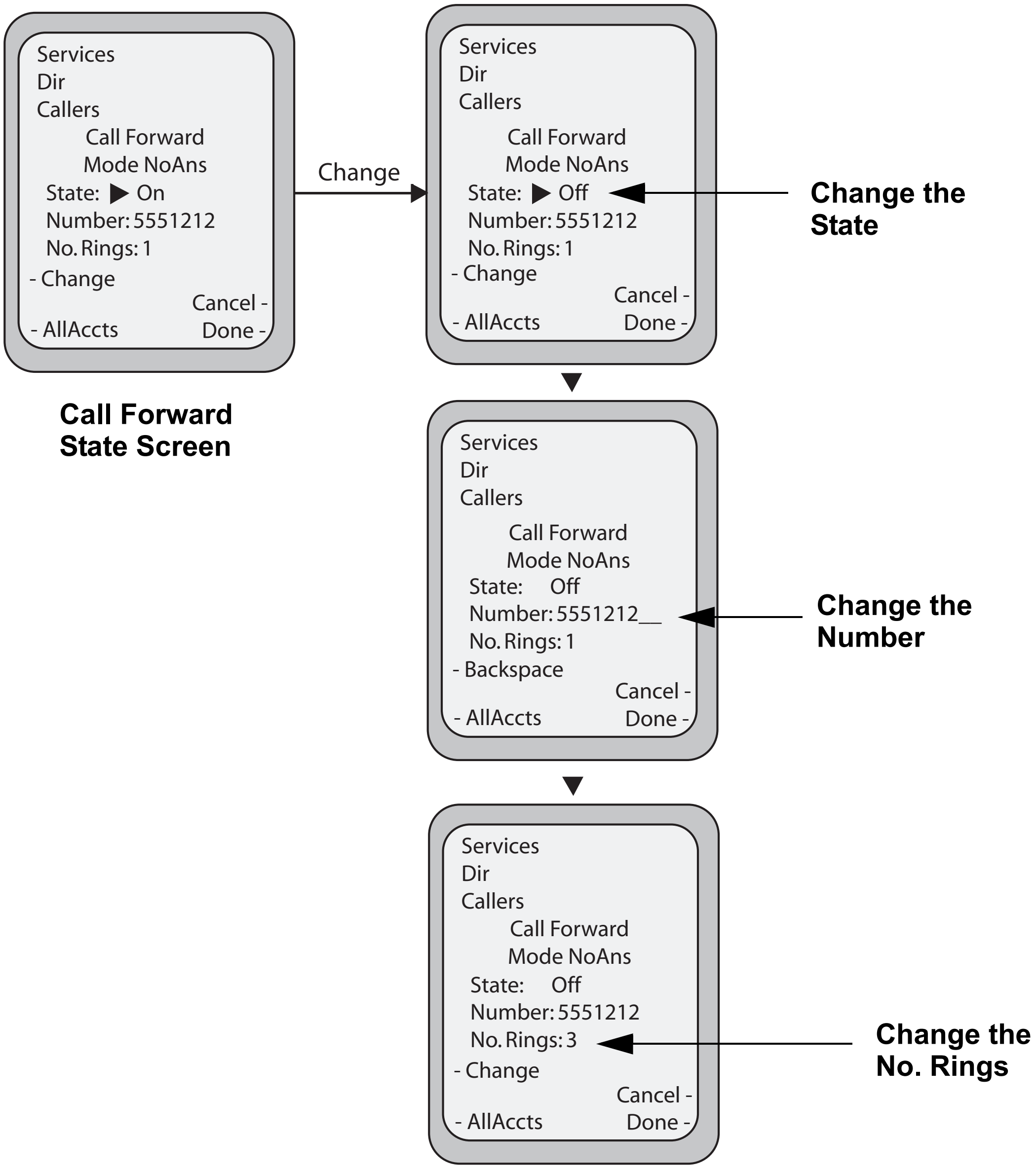
### Aastra IP Phone UI

| **Step** | **Action** |
|---|---|
| 3 | Select a state for the account(s) in focus using the **UP** and **DOWN** arrow keys.<br>You can enable/disable any or all of the following states for an account:<br>• **All** - Enables **CFWD All** for an account and forwards all incoming calls for that account, to the specified number.<br>• **Busy** - Enables **CFWD Busy** for an account and forwards incoming calls to a specified number if DND has been enabled for that account OR if the account is currently engaged in another call.<br>• **No Answer** - Enables **CFWD NoAns** for an account and forwards incoming calls to a specified number if the call has not been answered for the specified number of rings.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off Key**- Disables all CFWD states for the current account in focus.<br>**All On Key** - Enables all CFWD states for the current account in focus.<br>**CopytoAll Key** - Copies the call forward phone number and state of the Call Forward mode (All, Busy, No Answer) in focus to every Call Forward mode of that account. For example, if you have the cursor pointing at the "**All**" state and it is enabled and has a call forward phone number configured, pressing the **CopytoAll** Key enables the **Busy** state and the **NoAns** state and assigns the same phone number to both states.<br>**Cancel Key** - Cancels any configuration you may have made without saving. To cancel a configuration, you must press this **CANCEL** key before pressing the **DONE** key. |

## Aastra IP Phone UI

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>4</td><td>

For the **CFWD No Answer** state, press the **CHANGE** key for the mode you selected in step 2. This displays the Call Forward State screen. In the following example, the CFWD All state is ON..



Services
Dir
Callers
Call Forward
- Change
Cancel -
- AllAccts
Done -
Change
Change the State
Change the Number
- Backspace
Change the No. Rings

Mode NoAns
State: ▶ On
Number: 5551212
No. Rings: 1

**Call Forward State Screen**

Mode NoAns
State: ▶ Off
Number: 5551212
No. Rings: 1

Mode NoAns
State: Off
Number: 5551212__
No. Rings: 1

Mode NoAns
State: Off
Number: 5551212
No. Rings: 3

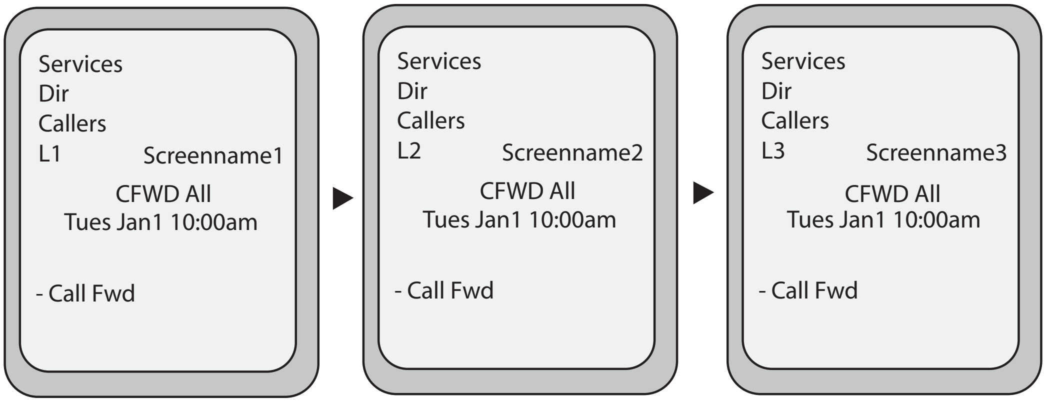
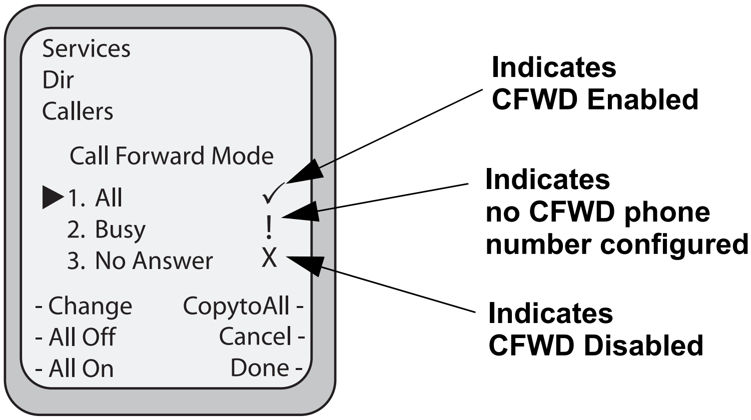
**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode.

</td></tr>
</table>

### Aastra IP Phone UI

| Step | Action |
|---|---|
| 5 | Press the **CHANGE** key in the CFWD State screen. With the cursor in the "**State**" field, toggle the state ON and OFF by pressing the **CHANGE** key.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 6 | Use the **DOWN** arrow key to scroll to the "**Number**" field. Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify.<br>Use the **BACKSPACE** key if required to delete characters.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 7 | Use the **DOWN** arrow key to scroll to the "**No. Rings**" field. Press the **CHANGE** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 8 | Press **DONE** in the CFWD State Screen to save all changes.<br>Press **DONE** in the CFWD Mode Screen to save all changes. |

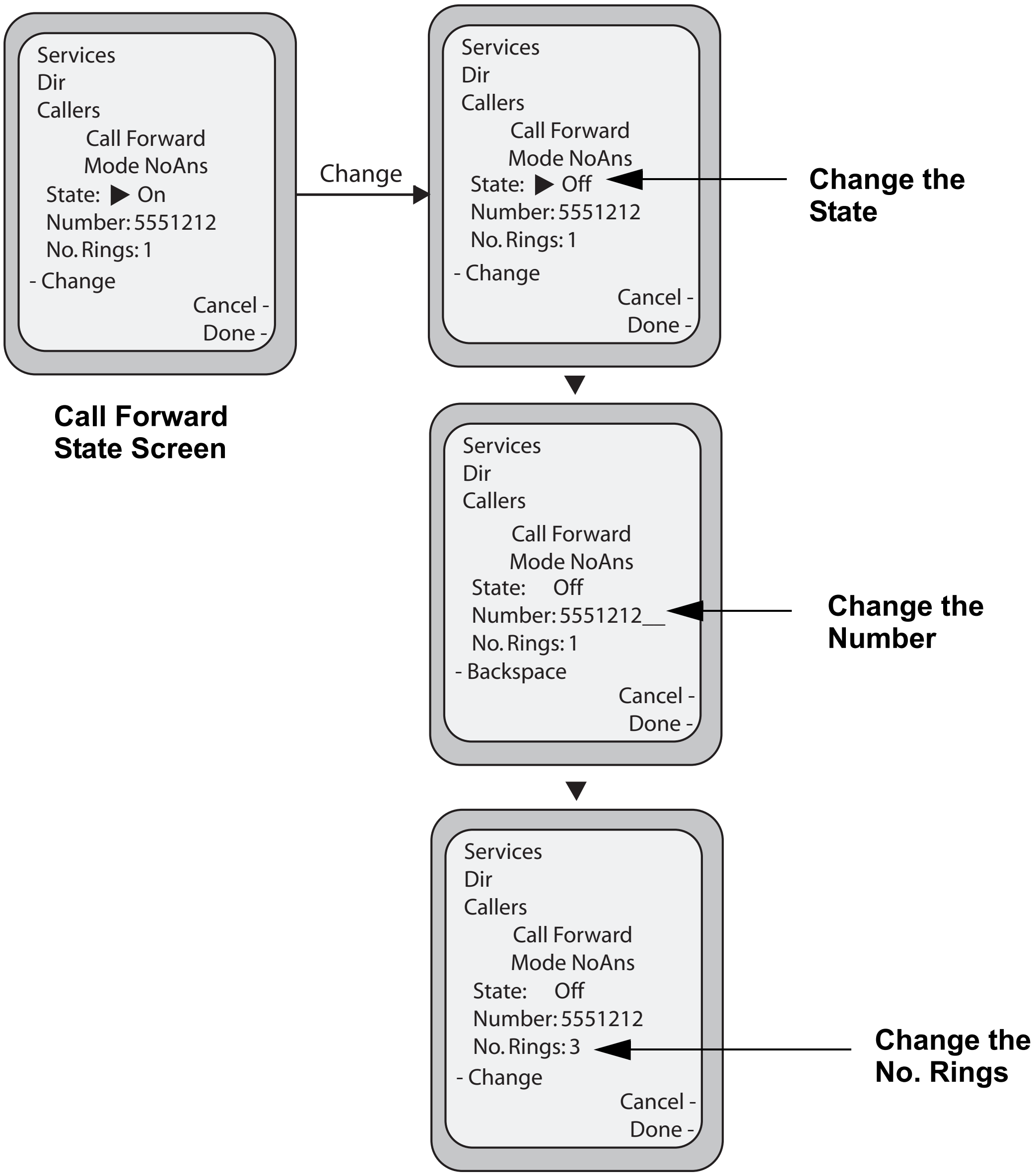
**Aastra IP Phone UI**

| Step | Action |
|---|---|
| ***CFWD in Phone Mode (55i, 57i, and 57i CT)*** | |
| 1 | Use the **RIGHT** and **LEFT** arrow keys to scroll through each account.<br> Services<br>Dir<br>Callers<br>L1 Screenname1<br>CFWD All<br>Tues Jan1 10:00am<br>- Call Fwd<br>Services<br>Dir<br>Callers<br>L2 Screenname2<br>CFWD All<br>Tues Jan1 10:00am<br>- Call Fwd<br>Services<br>Dir<br>Callers<br>L3 Screenname3<br>CFWD All<br>Tues Jan1 10:00am<br>- Call Fwd<br>In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Screenname1, 2 and 3 have "**CFWD All**" enabled.<br>**Note: In "Phone" mode, the initial configuration you set for an account applies to all the accounts on the phone.** |
| 2 | Press the **Call Forward** key. The Call Forward Mode screen displays. Use the **UP** and **DOWN** arrow keys to scroll through each state type.<br>**Call Forward Mode Screen**<br> Services<br>Dir<br>Callers<br>Call Forward Mode<br>▶1. All ✓<br>2. Busy !<br>3. No Answer X<br>- Change CopytoAll -<br>- All Off Cancel -<br>- All On Done -<br>Indicates CFWD Enabled<br>Indicates no CFWD phone number configured<br>Indicates CFWD Disabled<br>In the above example, **CFWD All** is enabled as indicated by a checkmark ( ✓), **CFWD Busy** is enabled but no call forward phone number is configured as indicated by a **!**, and **CFWD No Answer** is disabled, as indicated by an **X.** |

### Aastra IP Phone UI

| **Step** | **Action** |
|---|---|
| 3 | Select a state for the phone using the **UP** and **DOWN** arrow keys.<br>You can enable/disable a specific account on the phone with any or all of the following states. However, the configuration you set will apply to all accounts on the phone.<br>• **All** - Enables **CFWD All** on the phone and forwards all incoming calls to the specified number.<br>• **Busy** - Enables **CFWD Busy** on the phone and forwards incoming calls to a specified number if DND has been enabled OR if the phone is currently engaged in another call.<br>• **No Answer** - Enables **CFWD NoAns** on the phone and forwards incoming calls to a specified number if the call has not been answered for the specified number of rings.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off Key**- Disables all CFWD modes.<br>**All On Key** - Disables all CFWD modes.<br>**CopytoAll Key** - Copies the call forward phone number and state of the Call Forward mode (All, Busy, No Answer) in focus to every Call Forward mode. For example, if you have the cursor pointing at the "**All**" state and it is enabled and has a call forward phone number configured, pressing the **CopytoAll** Key enables the **Busy** state and the **NoAns** state and assigns the same phone number to both states.<br>**Cancel Key** - Cancels any configuration you may have made without saving. To cancel a configuration, you must press this **CANCEL** key before pressing the **DONE** key. |

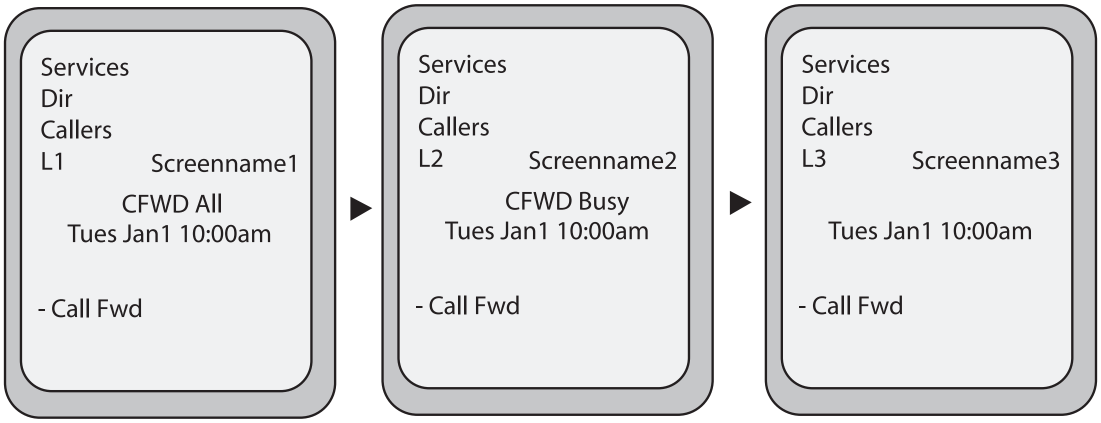
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 4 | In the **CFWD No Answer** state, press the **CHANGE** key for the mode you selected in step 2. This displays the Call Forward State screen. In the following example, the CFWD All state is ON..<br><br> Services<br>Dir<br>Callers<br>Call Forward<br>Mode NoAns<br>State: ▶ On<br>Number: 5551212<br>No. Rings: 1<br>- Change<br>Cancel -<br>Done -<br>Change<br>Services<br>Dir<br>Callers<br>Call Forward<br>Mode NoAns<br>State: ▶ Off<br>Number: 5551212<br>No. Rings: 1<br>- Change<br>Cancel -<br>Done -<br>Change the State<br>Services<br>Dir<br>Callers<br>Call Forward<br>Mode NoAns<br>State: Off<br>Number: 5551212__<br>No. Rings: 1<br>- Backspace<br>Cancel -<br>Done -<br>Change the Number<br>Services<br>Dir<br>Callers<br>Call Forward<br>Mode NoAns<br>State: Off<br>Number: 5551212<br>No. Rings: 3<br>- Change<br>Cancel -<br>Done -<br>Change the No. Rings<br>**Call Forward State Screen** |
| 5 | Press the **CHANGE** key in the CFWD State screen. With the cursor in the "**State**" field, toggle the state ON and OFF by pressing the **CHANGE** key. |

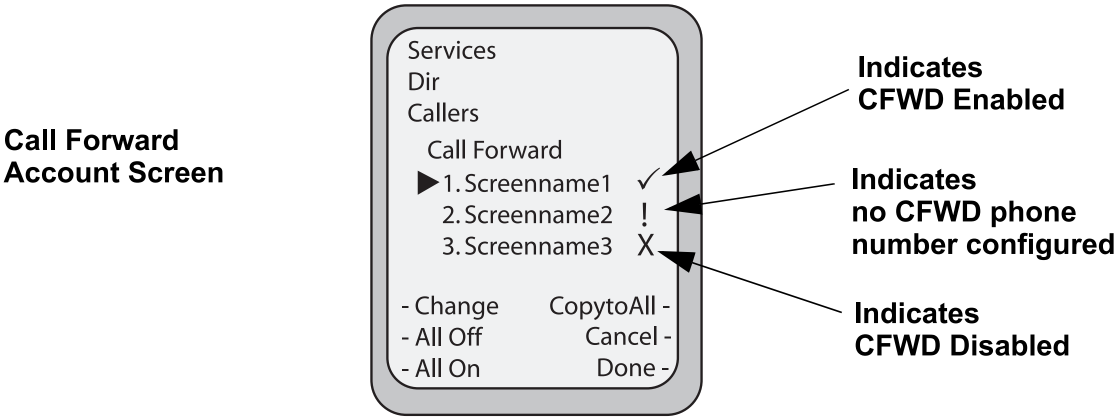
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 6 | Use the **DOWN** arrow key to scroll to the "**Number**" field. Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify.<br>Use the **BACKSPACE** key if required to delete characters. |
| 7 | Use the **DOWN** arrow key to scroll to the "**No. Rings**" field. Press the **CHANGE** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call. |
| 8 | Press **DONE** in the CFWD State Screen to save all changes.<br>Press **DONE** in the CFWD Mode Screen to save all changes.<br>**Note: In "Phone" mode, the configuration applies to all the accounts on the phone.** |

<table>
<tr><th colspan="2">Aastra IP Phone UI</th></tr>
<tr><th>Step</th><th>Action</th></tr>
<tr><td colspan="2"><em><strong>CFWD in Custom Mode (55i, 57i, and 57i CT</strong></em></td></tr>
<tr><td>1</td><td>Use the <strong>RIGHT</strong> and <strong>LEFT</strong> arrow keys to scroll through each account.


Services
Dir
Callers
L1 Screenname1
CFWD All
Tues Jan1 10:00am
- Call Fwd
Services
Dir
Callers
L2 Screenname2
CFWD Busy
Tues Jan1 10:00am
- Call Fwd
Services
Dir
Callers
L3 Screenname3
Tues Jan1 10:00am
- Call Fwd

In the above example, Screenname1, Screenname2, and Screenname3, are three accounts configured on the phone. Screenname1 has “<strong>CFWD All</strong>” enabled, Screenname2 has “<strong>CFWD Busy</strong>” enabled, and Screenname3 has CFWD disabled as indicated by no message displayed.</td></tr>
<tr><td>2</td><td>With the account in focus on the IP Phone UI, press the <strong>Call Forward</strong> key. The Call Forward Account screen displays which lists all the accounts on the phone. Use the <strong>UP</strong> and <strong>DOWN</strong> arrow keys to scroll through each account.


Services
Dir
Callers
Call Forward
▶1. Screenname1 ✓
2. Screenname2 !
3. Screenname3 X
- Change
CopytoAll -
- All Off
Cancel -
- All On
Done -

<strong>Call Forward Account Screen</strong>

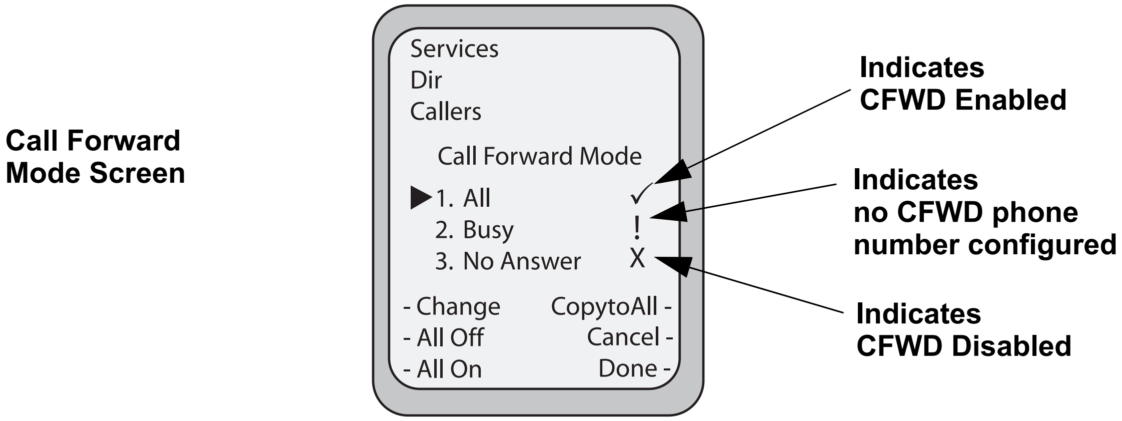
<strong>Indicates CFWD Enabled</strong>

<strong>Indicates no CFWD phone number configured</strong>

<strong>Indicates CFWD Disabled</strong>

In the above example, Screenname1 has one or more CFWD states enabled as indicated by a checkmark ( ✓), Screenname 2 has one or more CFWD states enabled but a specific state has no call forward phone number configured as indicated by a <strong>!</strong>, and Screenname3 has one or more CFWD states disabled as indicated by an <strong>X.</strong></td></tr>
</table>

## Aastra IP Phone UI

| Step | Action |
|---|---|
| 3 | Select an account using the **UP** and **DOWN** arrow keys.<br>You can also use the following keys if required:<br>**All Off Key**- Disables CFWD for all accounts on the phone.<br>**All On Key -** Enables CFWD for all accounts on the phone.<br>**CopytoAll Key -** Copies all settings for the acccount you select, to all other accounts on the Call Forward Account screen. For example, if you have the cursor pointing at Screenname1, and you press the **CopytoAll** key, all of the CFWD settings for Screenname1 are copied to Screenname2 and Screenname3.<br>**Cancel Key -** Cancels any configuration you may have made without saving. To cancel a configuration, you must press this **CANCEL** key before pressing the **DONE** key. |
| 4 | After selecting an account, press **CHANGE**.<br>The Call Forward Mode screen displays for the account you selected. Use the **UP** and **DOWN** arrow keys to scroll through each state type.<br> Call Forward Mode Screen<br>Services<br>Dir<br>Callers<br>Call Forward Mode<br>▶1. All ✓<br>2. Busy !<br>3. No Answer X<br>- Change<br>- All Off<br>- All On<br>CopytoAll -<br>Cancel -<br>Done -<br>Indicates CFWD Enabled<br>Indicates no CFWD phone number configured<br>Indicates CFWD Disabled<br>In the above example, **CFWD All** is enabled as indicated by a checkmark ( ✓), **CFWD Busy** is enabled but no call forward phone number is configured as indicated by a **!**, and **CFWD No Answer** is disabled, as indicated by an **X.** |

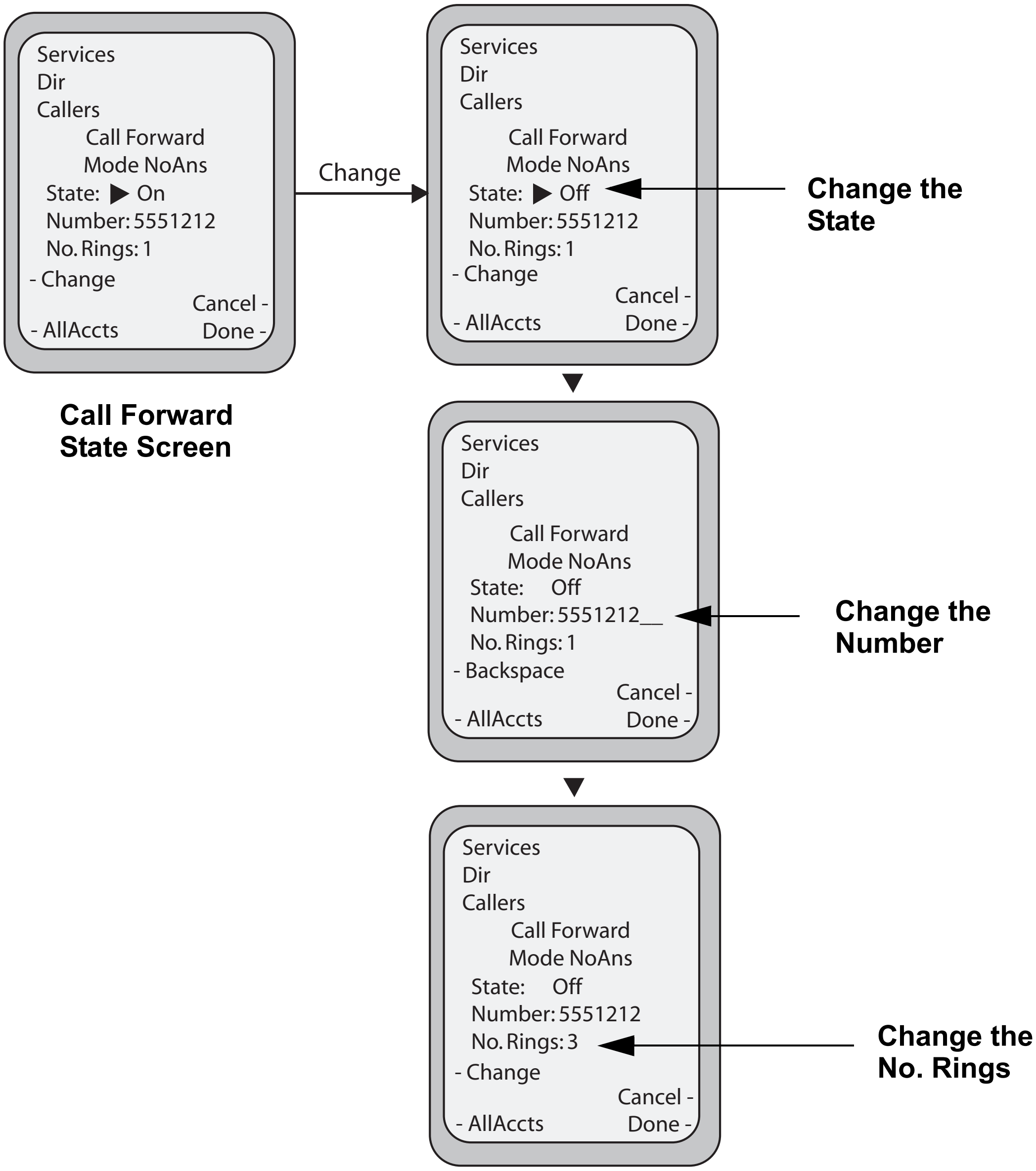
**Aastra IP Phone UI**

| **Step** | **Action** |
|---|---|
| 5 | Select a state for the selected account(s) using the **UP** and **DOWN** arrow keys.<br>You can enable/disable any or all of the following states for a specific account or for all accounts (with individual configurations):<br>• **All** - Enables **CFWD All** for an account and forwards all incoming calls for that account, to the specified number. The phone number can be different between accounts.<br>• **Busy** - Enables **CFWD Busy** for an account and forwards incoming calls to a specified number if DND has been enabled for that account OR if that account is currently engaged in another call. The phone number can be different between accounts.<br>• **No Answer** - Enables **CFWD NoAns** for an account and forwards incoming calls to a specified number if the call has not been answered for a specified number of rings. The phone number can be different between accounts.<br>**Note:** If **CFWD All** AND **CFWD Busy** AND **CFWD NoAns** are all enabled (and/or if the account has DND enabled), the **CFWD All** settings take precedence over **CFWD Busy** and **CFWD NoAns.**<br>You can also use the following keys if required:<br>**All Off Key**- Disables all CFWD states for the selected account.<br>**All On Key** - Enables all CFWD states for the selected account.<br>**CopytoAll Key** - Copies the call forward phone number and state of the selected Call Forward mode (All, Busy, No Answer) to every Call Forward mode of that account. For example, if you have the cursor pointing at the “**All**” state and it is enabled and has a call forward phone number configured, pressing the **CopytoAll** Key enables the **Busy** state and the **NoAns** state and assigns the same phone number to both states.<br>**Cancel Key** - Cancels any configuration you may have made without saving. To cancel a configuration, you must press this **CANCEL** key before pressing the **DONE** key. |

## Aastra IP Phone UI

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>6</td><td>

Press the **CHANGE** key for the mode you selected in step 4. This displays the Call Forward State screen. In the following example, the CFWD All state is ON..



Services
Dir
Callers
Call Forward
Mode NoAns
State: ▶ On
Number: 5551212
No. Rings: 1
- Change
Cancel -
- AllAccts
Done -
Change
Services
Dir
Callers
Call Forward
Mode NoAns
State: ▶ Off
Number: 5551212
No. Rings: 1
- Change
Cancel -
- AllAccts
Done -
Change the State
Call Forward State Screen
Services
Dir
Callers
Call Forward
Mode NoAns
State: Off
Number: 5551212__
No. Rings: 1
- Backspace
Cancel -
- AllAccts
Done -
Change the Number
Services
Dir
Callers
Call Forward
Mode NoAns
State: Off
Number: 5551212
No. Rings: 3
- Change
Cancel -
- AllAccts
Done -
Change the No. Rings

**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode.

</td></tr>
</table>

### Aastra IP Phone UI

| Step | Action |
|---|---|
| 7 | Press the **CHANGE** key in the CFWD State screen. With the cursor in the "**State**" field, toggle the state ON and OFF by pressing the **CHANGE** key.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 8 | Use the **DOWN** arrow key to scroll to the "**Number**" field. Enter a phone number to apply to the current state in focus. When the phone is in the state you specified, and a call comes into the phone, it forwards the call to the number you specify.<br>Use the **BACKSPACE** key if required to delete characters.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 9 | Use the **DOWN** arrow key to scroll to the "**No. Rings**" field. Press the **CHANGE** key to select the number of rings to apply to the phone for call forwarding incoming calls. Valid values are 1 to 20. Default is 1.<br>When the phone receives an incoming call, and call forward is configured on the phone, the phone rings the number of times you specify in the No. Rings screen, and then forwards the call.<br>**Note:** You can press the **AllAccts** key to copy the settings in the current Call Forward Settings screen for a specific call forward mode, to every account on the phone. Every account will have the same settings for that call forward mode. |
| 10 | Press **DONE** in the CFWD State screen to save all changes.<br>Press **DONE** in the CFWD Mode screen to save all changes.<br>Press **DONE** in the CFWD Account screen to save all changes. |

## Multicast Group Paging

An Administrator or User can configure a specific softkey on the phone that allows you to send/receive a Real Time Transport Protocol (RTP) stream to/from pre-configured multicast address(es) without involving SIP signaling. This is called Group Paging on the IP phones. You can specify up to 5 listening multicast addresses.

An Administrator can use the following parameters in the configuration files to set Group Paging RTP Settings:

- **paging group listening**
- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **sofkeyN label, topsoftkeyN label, or expmodX keyN label**
- **softkeyN value, topsoftkeyN value, prgkeyN value, or expmodX keyN value**

An Administrator or User can use the following parameters in the Aastra Web UI to set Group Paging RTP Settings:

- **Paging Listen Addresses** (*Basic Settings->Preferences->Group Paging RTP Settings*)
- **<Paging> Softkey** (*Operation->Softkeys and XML, Operation->Programmable Keys, Operation->Expansion Keys*)

### *How it works*

After pressing a configured "Paging" softkey on the phone, the Phone sends RTP to a preconfigured multicast address. Any phone in the local network then listens for RTP on the preconfigured multicast address. For both sending and receiving of the multicast RTP there is no sip signaling involved. The Phone displays the "Paging" message to the phone's LCD.

**Note:** Multicast RTP is one way only - from sender to the receiver (i.e. from sender to the multicast address (receiver)).

The phone uses the G711 uLaw CODEC for multicast RTP.

The recipient can drop the incoming page if required. The recipient can also set Do Not Disturb (DND) to ignore any incoming pages.

**Note:** For outgoing RTP multicasts, all other existing calls on the phone are put on hold.

For incoming RTP multicasts, the ringing display is dependant on the "**Allow Barge-In**" parameter. If this parameter is **disabled**, and there is no other call on the phone, then the paging is automatically played via the preferred audio device (see the model-specific *IP Phone User Guide* for setting Audio Mode on the phone).

If there is an existing call on the phone, the call initially displays in the ringing state. The user has the option to accept/ignore the call. If the "**Allow Barge-In**" parameter is **enabled**, the RTP multicast call barges in, and any existing calls are put on hold.

If an RTP multicast session already exists on the phone, and the phone receives another incoming RTP multicast session, the priority is given to the first multicast session and the second multicast session is ignored. The behavior for the incoming calls in this case is also based on the setting for the "**Allow Barge-in**" parameter. The incoming call is handled as if there were an existing call already on the phone.

### *Configuring Group Paging RTP Settings*

#### Receiving End of Page Using the Configuration Files

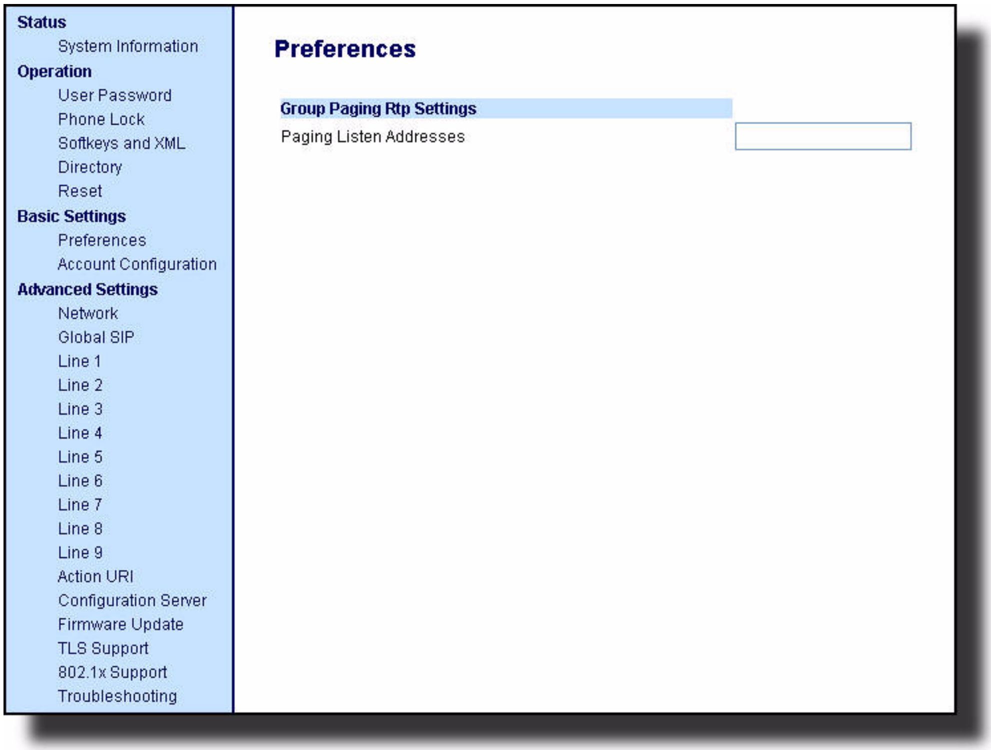
Use the following parameters to configure RTP streaming on the receiving end for Paging applications using the configuration files.

- **paging group listening.**

| **Parameter –**<br>*paging group listening* | **Aastra Web UI:** Basic Settings->Preferences-> Group Paging RTP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the multicast address(es) and the port on which the phone listens for incoming multicast RTP packets.<br>**Note:** If this field is blank, Paging listening capability is disabled on the phone. |
| **Format** | Comma separated list of IP Address in dotted decimal format:Port # |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | paging group listening: 239.0.1.15:10000,239.0.1.20:15000 |

## Receiving End of Page Using the Aastra Web UI

Use the following procedure to configure RTP streaming on the receiving end for Paging applications using the Aastra Web UI.

| | **Aastra Web UI** |
|---|---|
| 1 | Click on **Basic Settings->Preferences->Group Paging RTP Settings**.<br><br> Status<br>System Information<br>Operation<br>User Password<br>Phone Lock<br>Softkeys and XML<br>Directory<br>Reset<br>Basic Settings<br>Preferences<br>Account Configuration<br>Advanced Settings<br>Network<br>Global SIP<br>Line 1<br>Line 2<br>Line 3<br>Line 4<br>Line 5<br>Line 6<br>Line 7<br>Line 8<br>Line 9<br>Action URI<br>Configuration Server<br>Firmware Update<br>TLS Support<br>802.1x Support<br>Troubleshooting<br>Preferences<br>Group Paging Rtp Settings<br>Paging Listen Addresses |
| 2 | In the "**Paging Listen Addresses**" text box, enter the multicast IP address(es) and port number on which the phone listens for incoming multicast RTP packets.<br><br>**Note:** Enter the IP address in dotted decimal format (for example, **239.0.1.15:10000,239.0.1.20:15000**) If this field is blank, Paging listening capability is disabled on the phone. |
| 3 | Click Save Settings to save your changes. |

### Sending End of Page Using the Configuration Files

Use the following parameters to configure RTP streaming on the sending end for Paging applications using the configuration files.

- **softkeyN type, topsoftkeyN type, prgkeyN type, or expmodX keyN type**
- **sofkeyN label, topsoftkeyN label, or expmodX keyN label**
- **softkeyN value, topsoftkeyN value, prgkeyN value, or expmodX keyN value.**

### *Example*

The following is an example of configuring RTP streaming for Paging applications using the configuration files:

```
softkey1 type: paging
softkey1 label: Group 1
softkey1 value: 239.0.1.15:10000
```

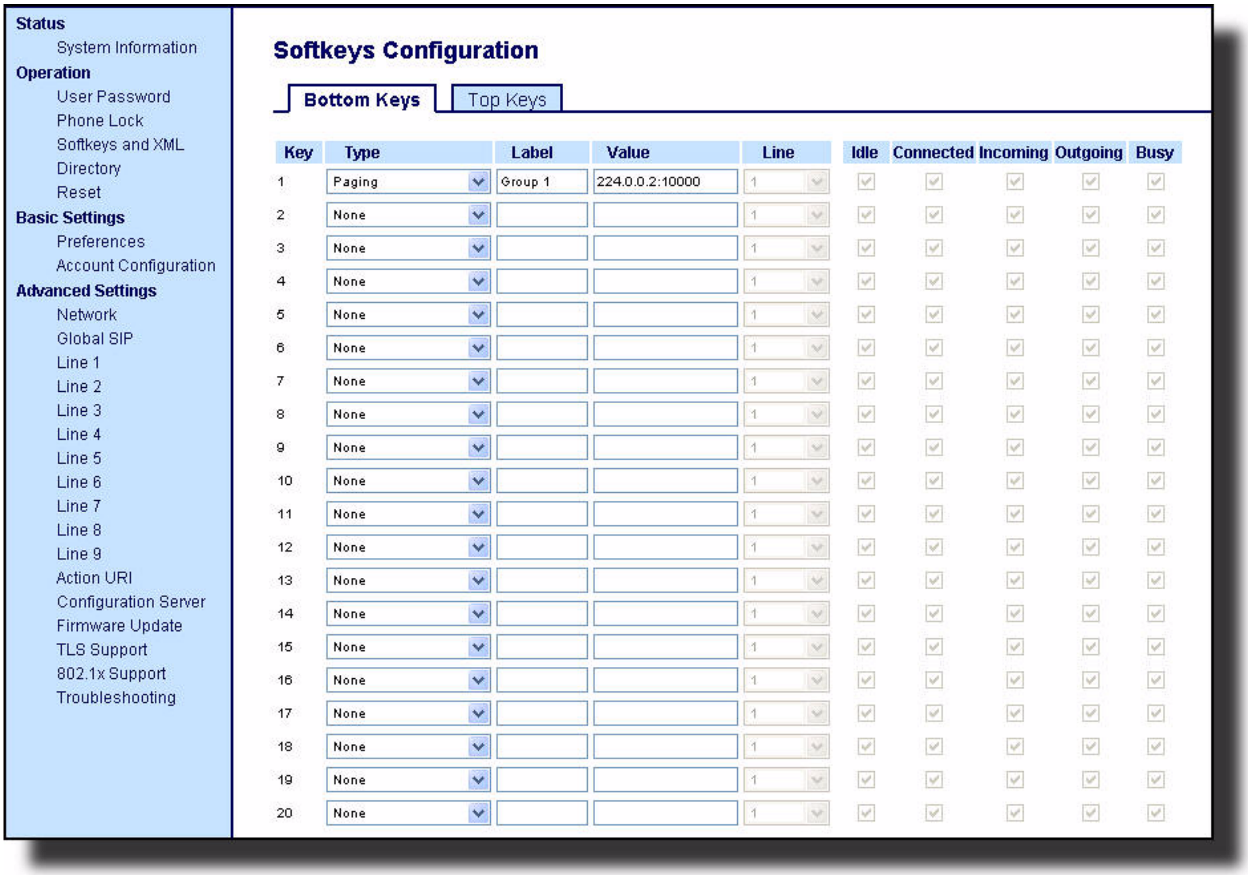
➡ **Note:** The “softkeyN value” field allows for one multicast address entry only. The “paging group listening” parameter value allows for multiple multicast addresses.

## Sending End of Page Using the Aastra Web UI

Use the following procedure to configure RTP streaming for Paging applications using the Aastra Web UI.

### Aastra Web UI

1 Click on **Softkeys and XML.**
or
Click on **Programmable Keys**.
or
Click on **Expansion Module Keys**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Bottom Keys
Top Keys

Softkeys Configuration

| Key | Type | Label | Value | Line | Idle | Connected | Incoming | Outgoing | Busy |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Paging | Group 1 | 224.0.0.2:10000 | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 2 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 3 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 4 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 5 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 6 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 7 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 8 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 9 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 10 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 11 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 12 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 13 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 14 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 15 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 16 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 17 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 18 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 19 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 20 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |

2 Choose a key that you want to assign as the Paging Key and select **Paging** from the "**Type**" field.

3 In the "**Label**" field, enter a key label to assign to the Paging key (for example, "**Group 1**").

| | **Aastra Web UI** |
|---|---|
| 4 | In the “**Value**” field, enter a multicast IP address and a port number for the Paging key. When you press this key, the phone initiates an outgoing multicast RTP session to the specified address(es) using the specified port. (For example, **239.0.1.15:10000).**<br>**Notes**:<br>**1.** When you select **Paging** for the “**Type**” field, the “**Line**” field and state fields are disabled.<br>**2.** The “**Value**” field allows for one multicast address entry only. The “Paging Listen Addresses” parameter in Step 2 allows for multiple multicast addresses. |
| 5 | Click Save Settings to save your changes. |

### *Using the Configured Paging Key on the IP Phone*

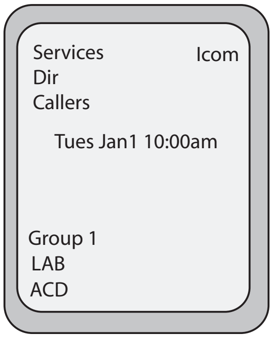
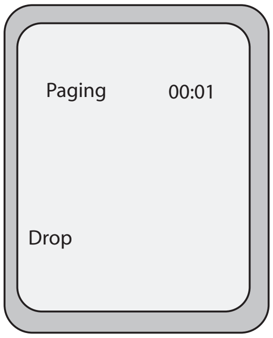
The following procedure describes the use of the Paging key. The procedures assumes you have already configured the Paging key using the configuration files or the Aastra Web UI.

---

**Notes:**
**1.** Recipient of a Paging call can set a global “Do Not Disturb” (DND) to ignore any incoming pages.
**2.** For incoming Paging, the phones use the Intercom configuration settings. The incoming Page is dependant on the “Allow Barge-In” parameter setting and the “*Idling/On Call*” state.

---

## Aastra IP Phone UI

| **Step** | **Action** |
|---|---|
| | On the IP Phone, press the softkey you configured for Paging (labeled as “**Group 1**” in the following illustration).<br><br> Services<br>Icom<br>Dir<br>Callers<br>Tues Jan1 10:00am<br>Group 1<br>LAB<br>ACD<br>The phone opens a multicast RTP session and an outgoing OR incoming phone screen displays as follows:<br><br> <br>Press the **Drop** softkey to end the multicast RTP session and return to the idle screen.<br>**Note:** If you enable global DND on the phone, the incoming multicast RTP session is dropped. |

## Simplified Transfer Using BLF and Speeddial Keys

In Release 2.2, a transfer (Xfer) enhancement has been added to the original functionality of the BLF and Speeddial keys - **BLF/Xfer** and **Speeddial/Xfer**.

Prior to this release, the IP Phones supported BLF, Xfer, and Speeddial softkeys and programmable keys. The BLF key allows one or more extensions to be monitored, and once there is any state change with those extensions, the key shows the status of the monitored lines. The Xfer key allows a call to be transferred to other recipients blindly or consultatively. The Speeddial key allows a number to be dialed quickly by pressing one key configured for speeddialing. After answering a call, the recipient can transfer the call to an extension by:

1. Pressing Xfer key
2. Entering the number of the extension or pressing speeddial or BLF key.
3. Pressing Xfer key again

Release 2.2 introduces a simpler way of transferring calls using the keys called **BLF/Xfer** and **Speeddial/Xfer**. The **BLF/Xfer** key combines the BLF and Xfer key's functionality together allowing the user to transfer calls or use BLF with one key. Similarly, the **Speeddial/Xfer** key combines the Speeddial key and Xfer key's functionality together allowing the user to press one key to speeddial and transfer calls.

**Note:** It is recommended that you enable the "**switch focus to ringing**" parameter when using the BLF and Speeddial transfer key feature. For more information about this parameter, see "Ability to Disable Switching Focus to a Ringing Line When on a Call" on page 74.

### *BLF/Xfer Key Requirements and Functionality*

- **BLF/Xfer and BLF**

  A BLF/Xfer key can be configured for subscribing to an extension and monitor the status of the extension, similar to the the BLF key functionality. Changes of the state of the monitored extension are indicated by a LED / Icon.

- **BLF/Xfer and Blind Transfer Calls**

  When the focused line is in the "**Connected**" state, pressing the BLF/Xfer key transfers the call to the extension unconditionally, disregarding the status of the monitored extension.

  If transferring a call to an extension fails, a message "*Transfer Failed*" displays on the phone, and you can reconnect the call (get the call back) by pressing the line key again.

- **BLF/Xfer and Call forward**

  When the focused line is in the "**Ringing**" state, pressing the BLF/Xfer key forwards the call to the extension unconditionally, disregarding the status of the monitored extension.

- **BLF/Xfer and Speeddial**

  When the focused line and the monitored extension are idle, pressing the BLF/Xfer key causes the phone to go offhook and dial the number of the extension.

### *Speeddial/Xfer Key Requirements and Functionality*

The Speeddial/Xfer key has the following capabilities:

- **Speeddial/Xfer and Speeddial**

  When the phone is in the "**Idle**" state, pressing the Speeddial/Xfer key causes the phone to go offhook and dial the predefined extension.

- **Speeddial/Xfer and Blind Transfer**

  When the phone is connected to a call, pressing the Speeddial/Xfer key blind transfers the call to the predefined target.

  If transferring a call fails, a message "*Transfer Failed*" displays, and you can reconnect the call (get the call back) by pressing the line key again.

- **Speeddial/Xfer and Call Forward**

  When the phone is in the "**Ringing**" state, pressing the Speeddial/Xfer key forwards the call to the predefined extension.

### *Configuring the BLF/Xfer Key and the Speeddial/Xfer Key Using the Configuration Files*

You use the following parameters in the configuration files to configure the BLF/Xfer key and/or Speeddial/Xfer key on the IP Phone.

| Softkey Parameters | Programmable Key Parameters | Expansion Module Parameters |
|---|---|---|
| softkeyN type<br>softkeyN label<br>softkeyN value<br>softkeyN line<br>softkeyN states | prgkeyN type<br>prgkeyN value<br>prgkeyN line | expmodN keyN type<br>expmodN keyN label<br>expmodN keyN value<br>expmodN keyN line |
| **Top Softkey Parameters** | | |
| topsoftkeyN type<br>topsoftkeyN label<br>topsoftkeyN value<br>topsoftkeyN line | | |

**Examples:**

```
softkey1 type: speeddialxfer
softkey1 label: BX7801
softkey1 value: 7801
softkey1 line: 1
softkey1 states: idle connected incoming outgoing busy

prgkey1 type: blfxfer
prgkey1 value: 35
prgkey1 line: 1
```

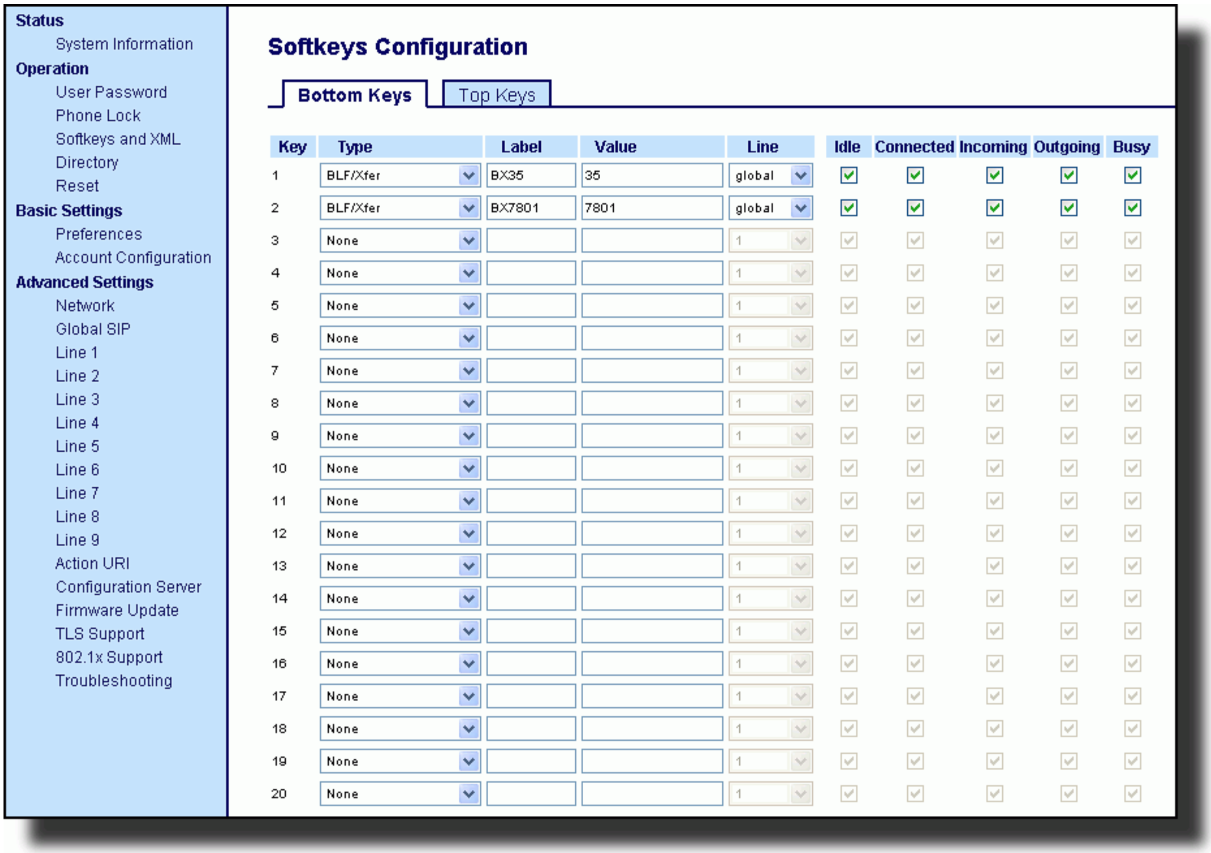
### *Configuring the BLF/Xfer Key and the Speeddial/Xfer Key Using the Aastra Web UI*

You configure the BLF/Xfer key and/or the Speeddial/Xfer Key on the IP phone similar to configuring a BLF key or speeddial key using the Aastra Web UI. Use the following procedure to configure BLF/Xfer and/or Speeddial/Xfer..

## Aastra Web UI

1 Click on **Operation->Softkeys and XML.**
or
Click on **Operation->Programmable Keys.**
or
Click on **Operation->Expansion Keys.**

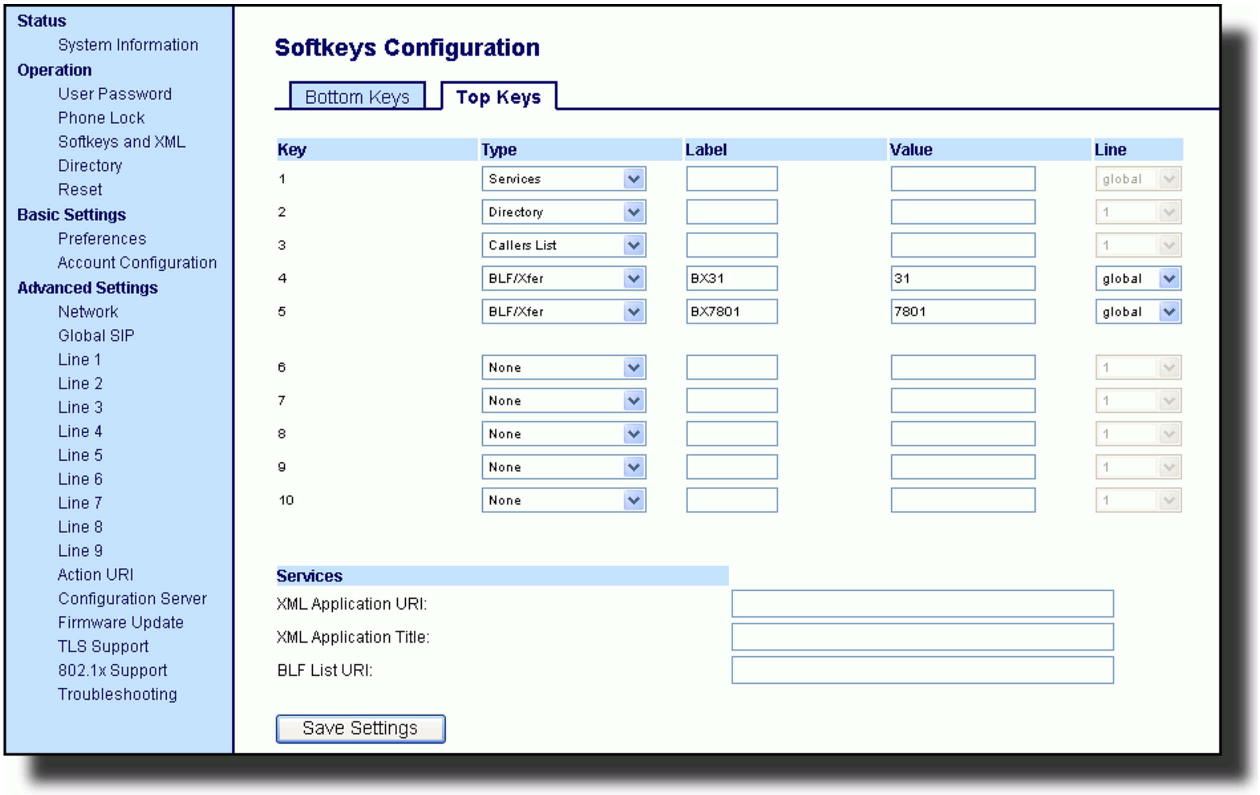
**Bottom Keys Tab (57i example).**


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Softkeys Configuration
Bottom Keys
Top Keys

| Key | Type | Label | Value | Line | Idle | Connected | Incoming | Outgoing | Busy |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BLF/Xfer | BX35 | 35 | global | ☑ | ☑ | ☑ | ☑ | ☑ |
| 2 | BLF/Xfer | BX7801 | 7801 | global | ☑ | ☑ | ☑ | ☑ | ☑ |
| 3 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 4 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 5 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 6 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 7 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 8 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 9 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 10 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 11 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 12 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 13 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 14 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 15 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 16 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 17 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 18 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 19 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |
| 20 | None | | | 1 | ☑ | ☑ | ☑ | ☑ | ☑ |

## Aastra Web UI

**Top Keys Tab (57i example)**


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Bottom Keys
Top Keys
Save Settings

**Softkeys Configuration**

| Key | Type | Label | Value | Line |
|---|---|---|---|---|
| 1 | Services | | | global |
| 2 | Directory | | | 1 |
| 3 | Callers List | | | 1 |
| 4 | BLF/Xfer | BX31 | 31 | global |
| 5 | BLF/Xfer | BX7801 | 7801 | global |
| 6 | None | | | 1 |
| 7 | None | | | 1 |
| 8 | None | | | 1 |
| 9 | None | | | 1 |
| 10 | None | | | 1 |

**Services**

XML Application URI:
XML Application Title:
BLF List URI:

| | |
|---|---|
| 2 | Choose a key that you want to assign the BLF/Xfer key or a Speeddial/Xfer key to, and select **BLF/Xfer** or **Speeddial/Xfer** from the "**Type**" field.. |
| 3 | In the "**Label**" field, enter a key label to assign to the BLF/Xfer key (for example, "**BX35**"). |
| 4 | In the "**Value**" field, enter the monitored extension (for example, "**35**"). |
| 5 | In the "**Line**" field, select the line for which you want to use the key functionality. |
| 6 | On the Bottom Key tab, in the States field, select the state(s) (idle, connected, incoming, outgoing, busy) for which you want to use on the key.<br>**Note:** States are not applicable to programmable keys. |
| 7 | Click Save Settings to save your changes. |

## Ability to Disable Switching Focus to a Ringing Line When on a Call

In Release 2.2, it is now possible to control the behavior of the phone when it receives an incoming call when it is already in a connected call. By default, and in the previous release behavior, the phone switches focus to the ringing line to enable the user to see who is calling them.

In Release 2.2, you can now turn off this functionality so that the phone now stays focused on the connected call. You can do this using the "**switch focus to ringing line**" parameter in the configuration files or the Aastra Web UI.

➡ **Note:** If you configure the BLF/Xfer key(s) and/or Speeddial/Xfer key(s) on the phone, you can enable or disable the switching of the user interface focus to ringing line while the phone is in the connected state.

### *Configuring "Switch Focus to Ringing Line" Using the Configuration Files*

You use the following parameter in the configuration files to enable or disable "Switch Focus to Ringing Line":

- **switch focus to ringing line**

| **Parameter –**<br>*switch focus to ringing line* | **Aastra Web UI:** Basic Settings->Preferences->General<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies whether or not the UI focus is switched to a ringing line while the phone is in the connected state. |
| **Format** | Boolean |
| **Default Value** | 1 (enable) |
| **Range** | 0 (disable)<br>1 (enable) |
| **Example** | switch focus to ringing line: 1 |

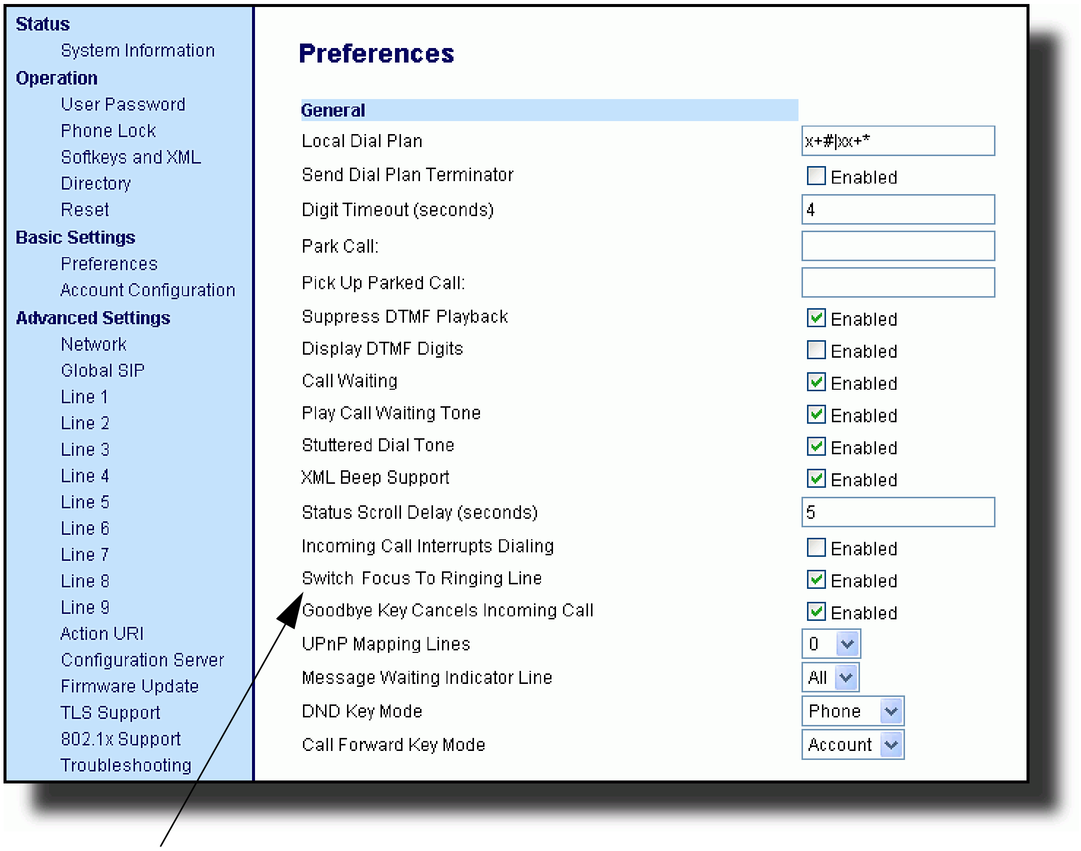
### *Configuring "Switch Focus to Ringing Line" Using the Aastra Web UI*

Use the following procedure to enable or disable the "Switch Focus to Ringing Line" using the Aastra Web UI.

**Aastra Web UI**

1 Click on **Basic Settings->Preferences->General.**

.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Preferences**

**General**

Local Dial Plan: x+#|xx+*
Send Dial Plan Terminator: ☐ Enabled
Digit Timeout (seconds): 4
Park Call:
Pick Up Parked Call:
Suppress DTMF Playback: ☑ Enabled
Display DTMF Digits: ☐ Enabled
Call Waiting: ☑ Enabled
Play Call Waiting Tone: ☑ Enabled
Stuttered Dial Tone: ☑ Enabled
XML Beep Support: ☑ Enabled
Status Scroll Delay (seconds): 5
Incoming Call Interrupts Dialing: ☐ Enabled
Switch Focus To Ringing Line: ☑ Enabled
Goodbye Key Cancels Incoming Call: ☑ Enabled
UPnP Mapping Lines: 0
Message Waiting Indicator Line: All
DND Key Mode: Phone
Call Forward Key Mode: Account

**"Switch Focus to Ringing Line" Parameter**

2 The "**Switch Focus to Ringing Line**" field is enabled by default. To disable this field, uncheck the box.

3 Click Save Settings to save your changes.

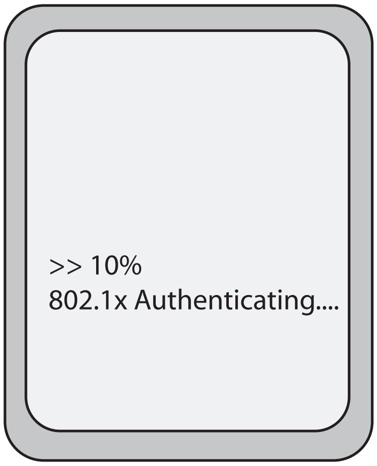
# Security Features

## 802.1x Support

The IP phones now support the IEEE 802.1x protocol. The 802.1x protocol is a standard for passing Extensible Authentication Protocol (EAP) over a wired or wireless Local Area Network (LAN).

The 802.1x protocol on the IP phone facilitates media-level access control, and offers the capability to permit or deny network connectivity, control LAN access, and apply traffic policy, based on user or endpoint identity. This feature supports both the EAP-MD5 and EAP-TLS protocols.

If 802.1x on the phone is enabled, the following screen displays during startup of the phone.



>> 10%
802.1x Authenticating....

If the 802.1x failed to authenticate with the server, the phone continues it's normal startup process using DHCP. However, the network port on the phone may or may not be disabled, depending on the switch configuration.

### *Certificates and Private Key Information*

- If the certificates and private key are NOT stored in the phone:
  - the phone connects to an open unauthenticated VLAN and the certificates are downloaded.
    or
  - the phone connects using EAP-MD5 to a restricted VLAN and the certificates are downloaded.
- If the certificates and private key ARE stored in the phone, the phone uses them during the authentication process.
- If the phone uses EAP-TLS for successful authentication, after the phone reboots, it downloads the latest certificates and private key files to the phone.
- The private key uses AES-128 to encrypt the private key file.
- Switch Supplicant Mode - The switch supports the following 2 modes:
  - **Single supplicant** - This mode enables the port once any machine connected to this port is authenticated. For security reasons, the IP phone has the option to disable the pass-through port.
  - **Multiple supplicants** - Using this mode, the switch can support multiple clients connected to same port. The switch distinguishes between the clients based on their MAC address.
- Factory default and recovery mode deletes all certificates and private keys, and sets the EAP type to **disabled**.

You can configure the 802.1x feature on the IP phone using the configuration files, the IP Phone UI, or the Aastra Web UI.

**Note:** If configuring 802.1x using the IP Phone UI, the certificates and private keys must already be configured and stored on the phone. Use the configuration files or the Aastra Web UI to load certificates and private keys.

### *Configuring the 802.1x Protocol Using the Configuration Files*

Use the following parameters to configure the 802.1x Protocol on your phone using the configuration files.

For EAP-MD5 use:

- **eap type**
- **identity**
- **md5 password**
- **pc port passthrough enabled**

For EAP-TLS use:

- **eap type**
- **identity**
- **802.1x root and intermediate certificates**
  (use 1 root and 0 or 1 intermediate certificates)
- **802.1x local certificate**
  (use 1 local certificate)
- **802.1x private key**
  (1 private key that corresponds to local certificate)
- **802.1x trusted certificates**
  (0 or more trusted certificates (a maximum of 2))
- **pc port passthrough enabled**

| | |
|---|---|
| **Parameter –**<br>*pc port passthru enabled* | **IP phone UI** Options->Administrator Menu->Network Settings->Ethernet Link<br>**Aastra Web UI** Advanced Settings->Network->Basic Network Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
| **Description** | Enables or disables the LAN PC port on the phone. |
| **Format** | Integer |
| **Default Value** | 1 (enable) |
| **Range** | 0 (disable)<br>1 (enable) |
| **Example** | pc port passthru enabled: 1 |

| | |
|---|---|
| **Parameter –**<br>*eap type* | **IP Phone UI:** Options->Administrator Menu->Network Settings->Ethernet Link->802.1x Settings<br>**Aastra Web UI:** Advanced Settings->802.1x Support->General<br>**Configuration Files** aastra.cfg, <mac>.cfg |
| **Description** | Specifies the type of authentication to use on the IP Phone. |
| **Format** | Integer |
| **Default Value** | 0 (disable) |
| **Range** | 0 (disable)<br>1 (MD5)<br>2 (TLS) |
| **Example** | eap type: 1 |

| **Parameter –**<br>*identity* | **IP Phone UI:** Options->Administrator Menu->Network Settings->Ethernet Link->802.1x Settings->EAP-MD5 Settings<br>**Aastra Web UI:** Advanced Settings->802.1x Support->General<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the identity or username used for authenticating the phone.<br>**Note:** The value you enter for this parameter also displays in the Aastra Web UI at the path Advanced Settings->802.1x Support->General->Identity. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | identity: phone1 |

| **Parameter –**<br>*md5 password* | **IP Phone UI:** Options->Administrator Menu->Network Settings->Ethernet Link->802.1x Settings->EAP-MD5 Settings<br>**Aastra Web UI:** Advanced Settings->802.1x Support->EAP-MD5 Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the password used for the MD5 authentication of the phone.<br>**Note:** The value you enter for this parameter also displays in the Aastra Web UI at the path Advanced Settings->802.1x Support->EAP-MD5 Settings->MD5 Password. The password displays as “*******”. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | md5 password: password1 |

| **Parameter –**<br>*802.1x root and intermediate certificates* | **Aastra Web UI:** Advanced Settings->802.1x Support-> EAP-TLS Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the file name that contains the root and intermediate certificates related to the local certificate. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | 802.1x root and intermediate certificates: filename.pem |

| **Parameter –**<br>*802.1x local certificate* | **Aastra Web UI:** Advanced Settings->802.1x Support-> EAP-TLS Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the file name that contains the local certificate. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | 802.1x local certificate: filename.pem |

| **Parameter –**<br>*802.1x private key* | **Aastra Web UI:** Advanced Settings->802.1x Support-> EAP-TLS Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the file name that contains the private key. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | 802.1x private key: filename.pem |

| **Parameter –**<br>*802.1x trusted certificates* | **Aastra Web UI:** Advanced Settings->802.1x Support-> EAP-TLS Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the file name that contains the trusted certificates. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | 802.1x trusted certificates: filename.pem |

### *Configuring the 802.1x Protocol Using the IP Phone UI*

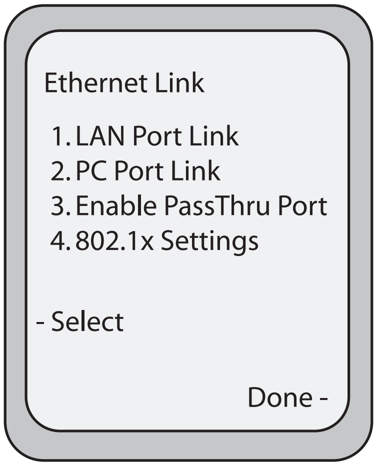
Use the following procedure to configure the 802.1x Protocol on your phone using the IP Phone UI.

---

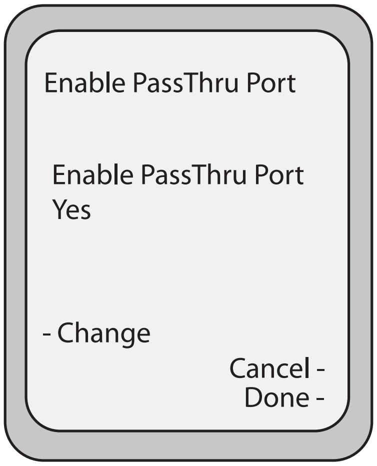
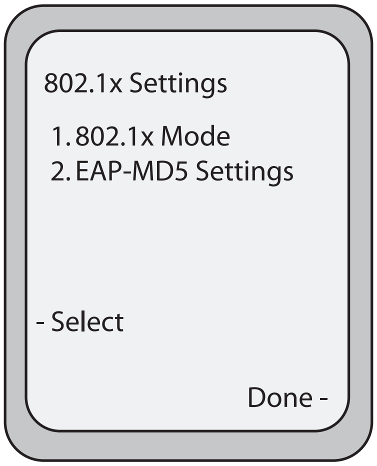
➡ **Note:** If configuring 802.1x using the IP Phone UI, the certificates and private keys must already be configured and stored on the phone. Use the configuration files or the Aastra Web UI to load certificates and private keys.

---

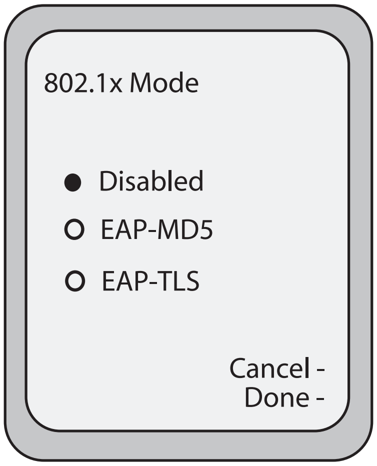
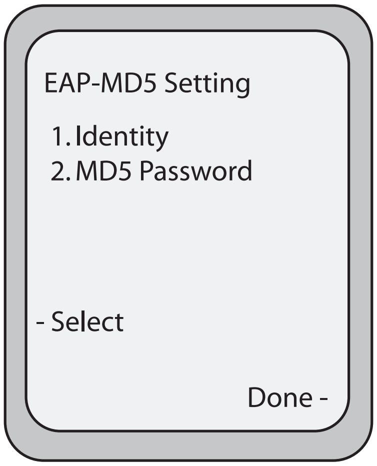
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 1 | Press 🔧 to enter the Options List. |
| 2 | Select **Administrator Menu** and enter your Administrator password. |
| 3 | Select **Network Settings->Ethernet->Enable PassThru Port.**<br><br>Ethernet Link<br>1. LAN Port Link<br>2. PC Port Link<br>3. Enable PassThru Port<br>4. 802.1x Settings<br>- Select<br>Done - |

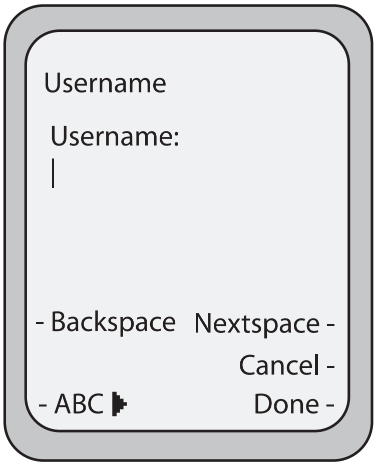
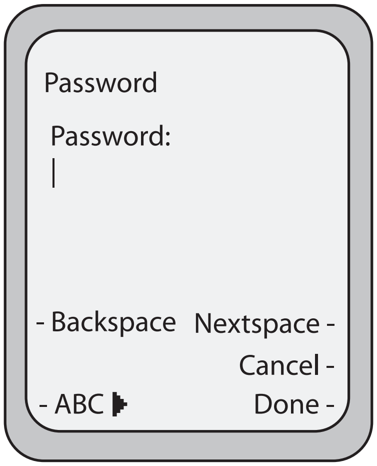
## Aastra IP Phone UI

| Step | Action |
|---|---|
| 4 | The PC PassThru Port is enabled by default.<br><br>Enable PassThru Port<br>Enable PassThru Port<br>Yes<br>- Change<br>Cancel -<br>Done -<br>**Note:** The PC PassThru Port must be enabled to use the 802.1x Protocol. |
| 5 | Press **Done**. |
| 6 | Select **802.1x Settings.** |
| 7 | Select **802.1x Mode.**<br><br>802.1x Settings<br>1. 802.1x Mode<br>2. EAP-MD5 Settings<br>- Select<br>Done - |

### Aastra IP Phone UI

| Step | Action |
|---|---|
| 8 | Select **EAP-MD5** to configure the phone to use MD5 authentication;<br>or<br>Select **EAP-TLS** to configure the phone to use TLS authentication.<br><br>802.1x Mode<br>● Disabled<br>○ EAP-MD5<br>○ EAP-TLS<br>Cancel -<br>Done -<br>**Note:** The 802.1x Protocol is disabled by default. If you select EAP-TLS authentication, you must use the configuration files or the Aastra Web UI to configure the certificates and private key for the phone. |
| 9 | Press **Done**. |
| 10 | To configure MD5, select **EAP-MD5 Settings**. |
| 11 | Select **Identity**.<br><br>EAP-MD5 Setting<br>1. Identity<br>2. MD5 Password<br>- Select<br>Done - |

## Aastra IP Phone UI

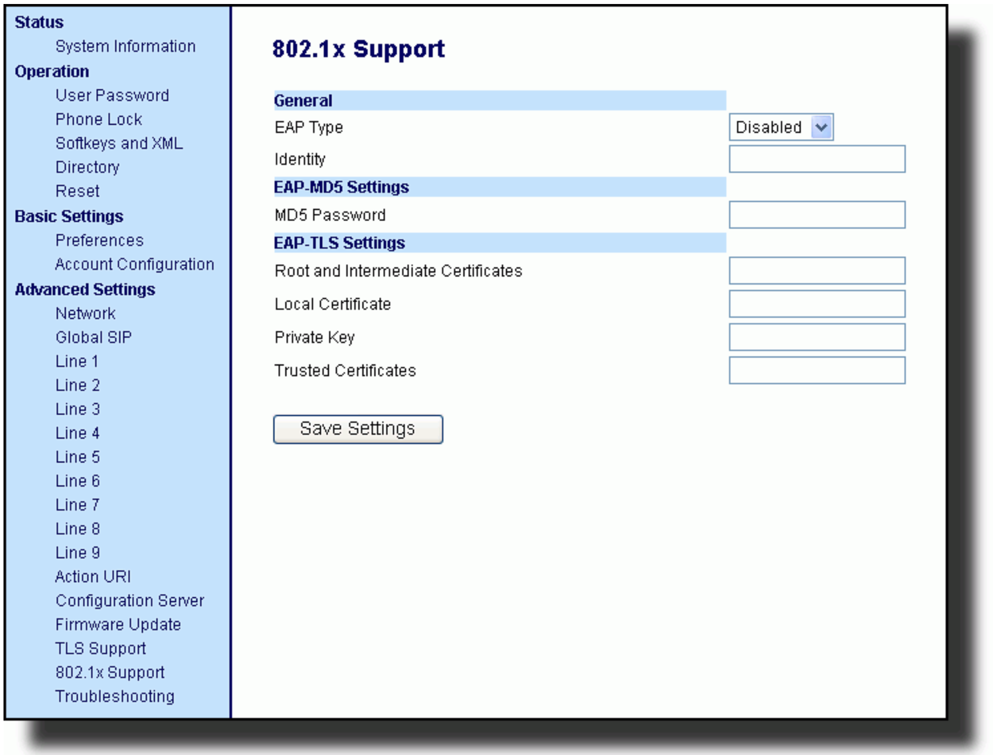
| Step | Action |
|---|---|
| 12 | Enter the identity or **username** used for authenticating the phone.<br><br>Username<br>Username:<br>\|<br>- Backspace Nextspace -<br>Cancel -<br>- ABC ▶ Done - |
| 13 | Use the softkeys as applicable while entering the username; then press **Done**. |
| 14 | Enter the password used for authenticating the phone.<br><br>Password<br>Password:<br>\|<br>- Backspace Nextspace -<br>Cancel -<br>- ABC ▶ Done - |
| 15 | Use the softkeys as applicable while entering the password; then press **Done**. |
| 16 | Press the key to save your settings and exit from the IP Phone UI. |

### *Configuring the 802.1x Protocol Using the Aastra Web UI*

Use the following procedure to configure the 802.1x Protocol on your phone using the Aastra Web UI.

## Aastra Web UI

Click on **Advanced Settings->802.1x Support**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Save Settings

802.1x Support

General
EAP Type: Disabled
Identity:

EAP-MD5 Settings
MD5 Password:

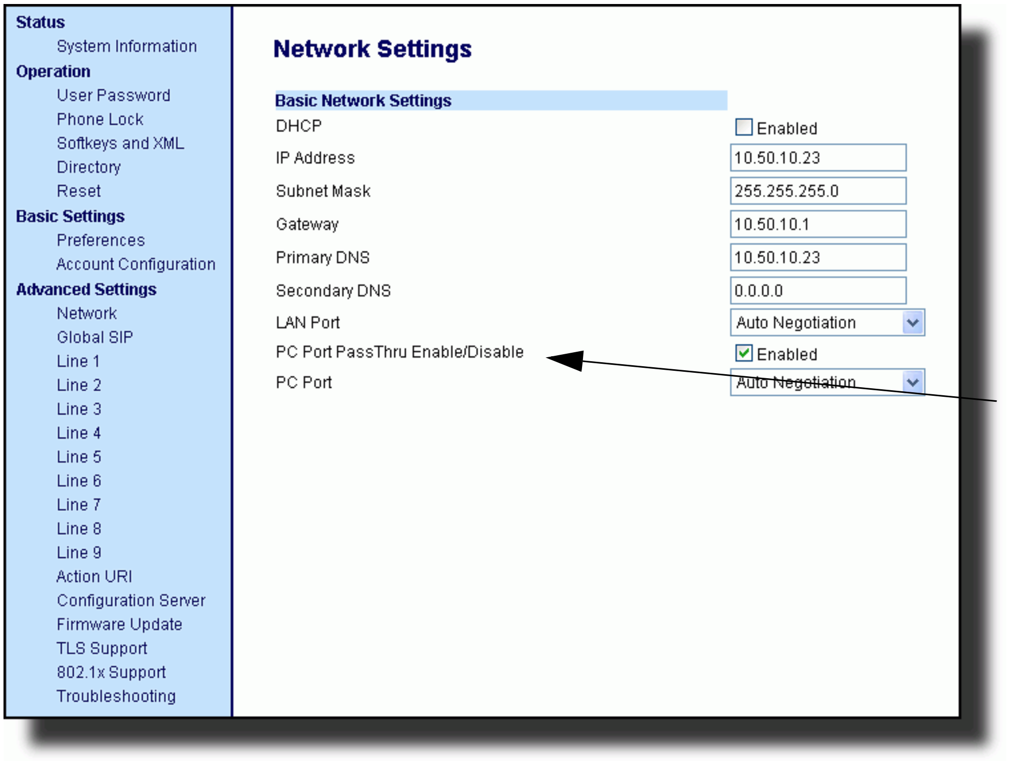
EAP-TLS Settings
Root and Intermediate Certificates:
Local Certificate:
Private Key:
Trusted Certificates:

***To configure EAP-MD5:***

| | |
|---|---|
| 17 | In the **"EAP Type**" field, select **EAP-MD5**.<br>Valid values are: **Disabled** (Default), **EAP-MD5**, and **EAP-TLS**. |
| 18 | In the "**Identify**" field, enter an Identity for the IP phone for which you are configuring 802.1x.<br>For example, **phone1**. |
| 19 | In the "**MD5 Password**" field, enter a password used for the MD5 authentication of the phone.<br>For example, **password1**. |
| 20 | Click Save Settings to save your changes. |

## Aastra Web UI

21 Click on **Advanced Settings->Network->Basic Network Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Network Settings**

**Basic Network Settings**

DHCP ☐ Enabled
IP Address 10.50.10.23
Subnet Mask 255.255.255.0
Gateway 10.50.10.1
Primary DNS 10.50.10.23
Secondary DNS 0.0.0.0
LAN Port Auto Negotiation
PC Port PassThru Enable/Disable ☑ Enabled
PC Port Auto Negotiation

**PC Port PassThru Enable/Disable**

22 The "**PC Port PassThru Enable/Disable**" field is enabled by default. To disable this field, uncheck the box.

**Note:** The PC Port PassThru Enable Disable field must be enabled to use the 802.1x Protocol.

23 Click Save Settings to save your changes.

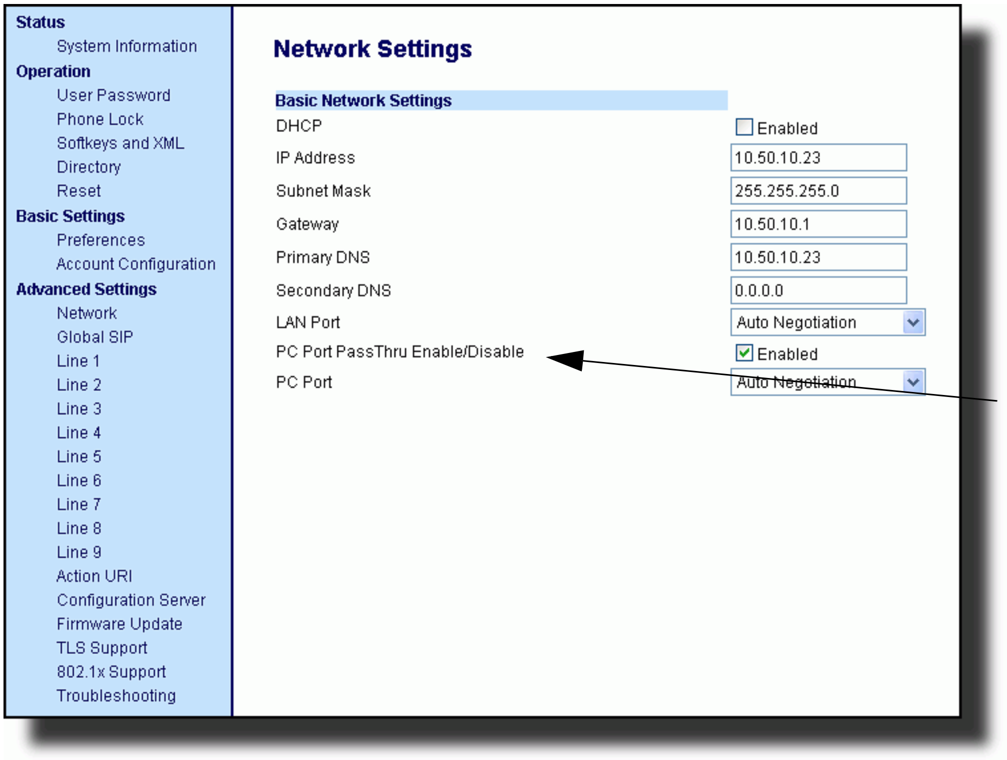
***To configure EAP-TLS:***

1 In the **"EAP Type**" field, select **EAP-TLS**.
Valid values are: **Disabled** (Default), **EAP-MD5**, and **EAP-TLS**.

2 In the "**Identify**" field, enter an Identity for the IP phone for which you are configuring 802.1x.
For example, **phone1**.

3 In the "**Root and Intermediate Certificates**" field, enter the filename that contains the root and intermediate certificates related to the local certificate. For example: **root_Intermed_certifi.pem**.

4 In the "**Local Certificate**" field, enter the filename that contains the local certificate. For example: **localcertificate.pem**.

| | **Aastra Web UI** |
|---|---|
| 5 | In the “**Private Key**” field, enter the filename that contains the private key. For example: **privatekey.pem**. |
| 6 | In the “**Trusted Certificates**” field, enter the filename that contains the trusted certificates. For example: **trusted_certificates.pem**. |
| 7 | Click Save Settings to save your changes. |
| 8 | Click on **Advanced Settings->Network->Basic Network Settings**.<br><br> Status<br>System Information<br>Operation<br>User Password<br>Phone Lock<br>Softkeys and XML<br>Directory<br>Reset<br>Basic Settings<br>Preferences<br>Account Configuration<br>Advanced Settings<br>Network<br>Global SIP<br>Line 1<br>Line 2<br>Line 3<br>Line 4<br>Line 5<br>Line 6<br>Line 7<br>Line 8<br>Line 9<br>Action URI<br>Configuration Server<br>Firmware Update<br>TLS Support<br>802.1x Support<br>Troubleshooting<br>Network Settings<br>Basic Network Settings<br>DHCP ☐ Enabled<br>IP Address 10.50.10.23<br>Subnet Mask 255.255.255.0<br>Gateway 10.50.10.1<br>Primary DNS 10.50.10.23<br>Secondary DNS 0.0.0.0<br>LAN Port Auto Negotiation<br>PC Port PassThru Enable/Disable ☑ Enabled<br>PC Port Auto Negotiation<br>**PC Port PassThru Enable/Disable** |
| 9 | The “**PC Port PassThru Enable/Disable**” field is enabled by default. To disable this field, uncheck the box.<br><br>**Note:** The PC Port PassThru Enable Disable field must be enabled to use the 802.1x Protocol. |
| 10 | Click Save Settings to save your changes. |

## Improved Configuration File Encryption

The IP phones have an encryption feature that allows Service Providers the capability of storing encrypted files on their server to protect against unauthorized access and tampering of sensitive information (i.e., user accounts, login passwords, registration information). Service Providers also have the capability of locking a phone to use a specific server-provided configuration only.

Only an System Administrator can encrypt the configurations files for an IP Phone. System Administrators use a password distribution scheme to manually pre-configure or automatically configure the phones to use the encrypted configuration with a unique key. From a Microsoft Windows command line, the System Administrator uses an Aastra-supplied encryption tool called "*anacrypt.exe*" to encrypt the *<MAC>.tuz* file.

The security feature described above prevents unauthorized parties from **reading** or **writing** the contents of the *<MAC>.tuz* file.

In Release 2.2, the IP phones include an improved encryption mechanism that:

- Prevents users from using the *<MAC>.tuz* file that does not match the user's phone MAC address.
- Renders the *<MAC>.tuz* file invalid if the user renames the file.
- Works with IP phone releases prior to Release 2.2.
- Provides compatibility between the previous encryption routine and the new decryption routine.

# XML Features

## SIP NOTIFY Triggers an XML Event

In order for an XML push to bypass the NAT/firewall, in Release 2.2 the phone now supports a proprietary SIP NOTIFY event (aastra-xml) with or without XML content.

If XML content is provided in the SIP NOTIFY, it is processed directly by the phone as it is done for an XML PUSH.

If the content is empty in the SIP NOTIFY, the phone automatically triggers a new pre-configured action uri (**action uri xml sip notify**).

***Example of a SIP NOTIFY with XML Content***

```
NOTIFY sip:200@10.30.100.103:5060 SIP/2.0
Via: SIP/2.0/UDP 10.30.100.103:5060;branch=z9hG4bK7bbc1fac;rport
From: <sip:201@10.30.100.103:5060>;tag=81be2861f3
To: Jacky200 <sip:200@10.30.100.103:5060>
Contact: <sip:201@10.30.100.103>
Call-ID: 59638f5d95c9d301
CSeq: 4 NOTIFY
Max-Forwards: 70
Event: aastra-xml
Content-Type: application/xml
Content-Length: 115
<AastraIPPhoneExecute><ExecuteItem URI="http://10.30.100.39/XMLtests/
SampleTextScreen.xml"/></AastraIPPhoneExecute>
```

When the phone receives the SIP NOTIFY, the XML content is processed as any XML object. In the above example, the phone calls http://10.30.100.39/XMLtests/SampleTextScreen.xml after reception of the SIP NOTIFY.

➡ **Note:** The phone supports all the current XML objects with all the existing limitations. For example if an AastraIPPhoneExecute is used, the embedded uri(s) can not be HTTPS based.

### *Example of a SIP NOTIFY without XML Content*

```
NOTIFY sip:200@10.30.100.103:5060 SIP/2.0
Via: SIP/2.0/UDP 10.30.100.103:5060;branch=z9hG4bK7bbc1fac;rport
From: <sip:201@10.30.100.103:5060>;tag=81be2861f3
To: Jacky200 <sip:200@10.30.100.103:5060>
Contact: <sip:201@10.30.100.103>
Call-ID: 59638f5d95c9d301
CSeq: 4 NOTIFY
Max-Forwards: 70
Event: aastra-xml
Content-Type: application/xml
Content-Length: 0
```

When the phone receives the SIP NOTIFY, it will trigger the **action uri xml sip notify** parameter,if it has been previously configured using the configuration files or the Aastra Web UI. If the **action uri xml sip notify** parameter is not configured, the phone does not do anything.

On the phone side, a System Administrator can enable or disable this SIP NOTIFY feature using the configuration files or the phone Web UI.

Also to ensure that the SIP NOTIFY is coming from a trusted source, it is recommended that you enable the Whitelist feature (Whitelist Proxy parameter) on the IP phone. If enabled, and the phone receives a SIP NOTIFY from a server that is NOT on the whitelist, the phone rejects the message.

### *Configuring XML SIP NOTIFY Feature Using the Configuration Files*

You can enable or disable the XML SIP NOTIFY feature using the following parameter in the configuration file:

- **sip xml notify event**

| **Parameter –**<br>*sip xml notify event* | **Aastra Web UI:** Advanced Settings->Global SIP-> Advanced SIP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Enables or disables the phone to accept or reject an aastra-xml SIP NOTIFY message.<br>**Note:** To ensure the SIP NOTIFY is coming from a trusted source, it is recommended that you enable the Whitelist feature (**Whitelist Proxy** parameter) on the IP phone. If enabled, and the phone receives a SIP NOTIFY from a server that is NOT on the whitelist (i.e. untrusted server), the phone rejects the message. |
| **Format** | Boolean |
| **Default Value** | 0 |
| **Range** | 0 - disabled<br>1 - enabled |
| **Example** | sip xml notify event: 1 |

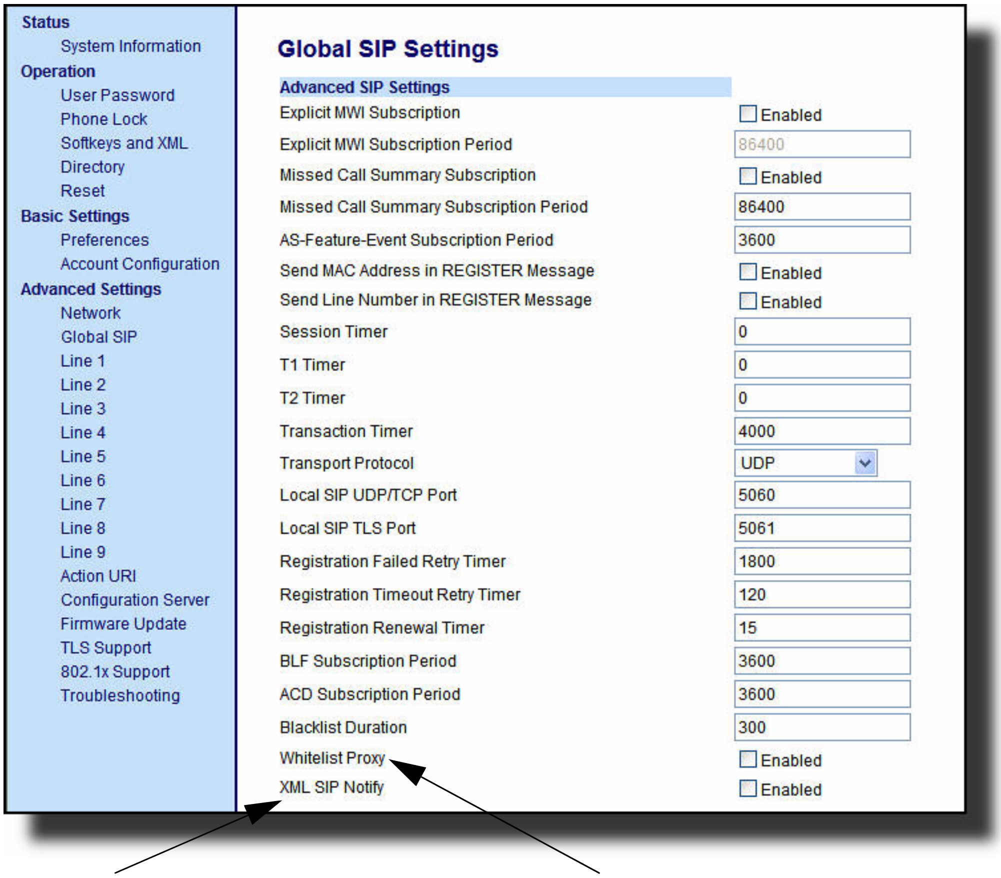
### *Configuring XML SIP NOTIFY Feature Using the Aastra Web UI*

Use the following procedure to enable/disable the XML SIP NOTIFY feature in the Aastra Web UI.

## Aastra Web UI

### *Enabling/Disabling the XML SIP NOTIFY Feature*

1 Click on **Advanced Settings->Global SIP->Advanced SIP Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Global SIP Settings**

| Advanced SIP Settings | |
|---|---|
| Explicit MWI Subscription | ☐ Enabled |
| Explicit MWI Subscription Period | 86400 |
| Missed Call Summary Subscription | ☐ Enabled |
| Missed Call Summary Subscription Period | 86400 |
| AS-Feature-Event Subscription Period | 3600 |
| Send MAC Address in REGISTER Message | ☐ Enabled |
| Send Line Number in REGISTER Message | ☐ Enabled |
| Session Timer | 0 |
| T1 Timer | 0 |
| T2 Timer | 0 |
| Transaction Timer | 4000 |
| Transport Protocol | UDP |
| Local SIP UDP/TCP Port | 5060 |
| Local SIP TLS Port | 5061 |
| Registration Failed Retry Timer | 1800 |
| Registration Timeout Retry Timer | 120 |
| Registration Renewal Timer | 15 |
| BLF Subscription Period | 3600 |
| ACD Subscription Period | 3600 |
| Blacklist Duration | 300 |
| Whitelist Proxy | ☐ Enabled |
| XML SIP Notify | ☐ Enabled |

**XML SIP Notify Parameter**

**Enabling Whitelist Proxy is recommended**

| | **Aastra Web UI** |
|---|---|
| 2 | The “**XML SIP Notify**" field is disabled by default. To enable this field, check the box.<br>This field enables or disables the phone to accept or reject an aastra-xml SIP NOTIFY message.<br>**Note:** To ensure the SIP NOTIFY is coming from a trusted source, it is recommended that you enable the Whitelist feature (**Whitelist Proxy** parameter) on the IP phone. If enabled, and the phone receives a SIP NOTIFY from a server that is NOT on the whitelist (i.e. untrusted server), the phone rejects the message.. |
| 3 | Click Save Settings to save your changes. |

### *Configuring the Action URI for an empty XML SIP NOTIFY using the Configuration Files*

If the content is missing in the SIP NOTIFY message received by the phone, the phone automatically uses the value you specify for the following parameter:

- **action uri xml sip notify**

| | |
|---|---|
| **Parameter –**<br>*action uri xml sip notify* | **Aastra Web UI:** Advanced Settings->Action URI<br>**Configuration Files** aastra.cfg, <mac>.cfg |
| **Description** | Specifies the URI to be called when an empty XML SIP NOTIFY is received by the phone.<br>**Note:** The **sip xml notify event** parameter must be enabled. |
| **Format** | HTTP(s) server path or Fully Qualified Domain Name |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | action uri xml sip notify: http://myserver.com/myappli.xml |

### *Configuring the Action URI for an empty XML SIP NOTIFY using the Aastra Web UI*

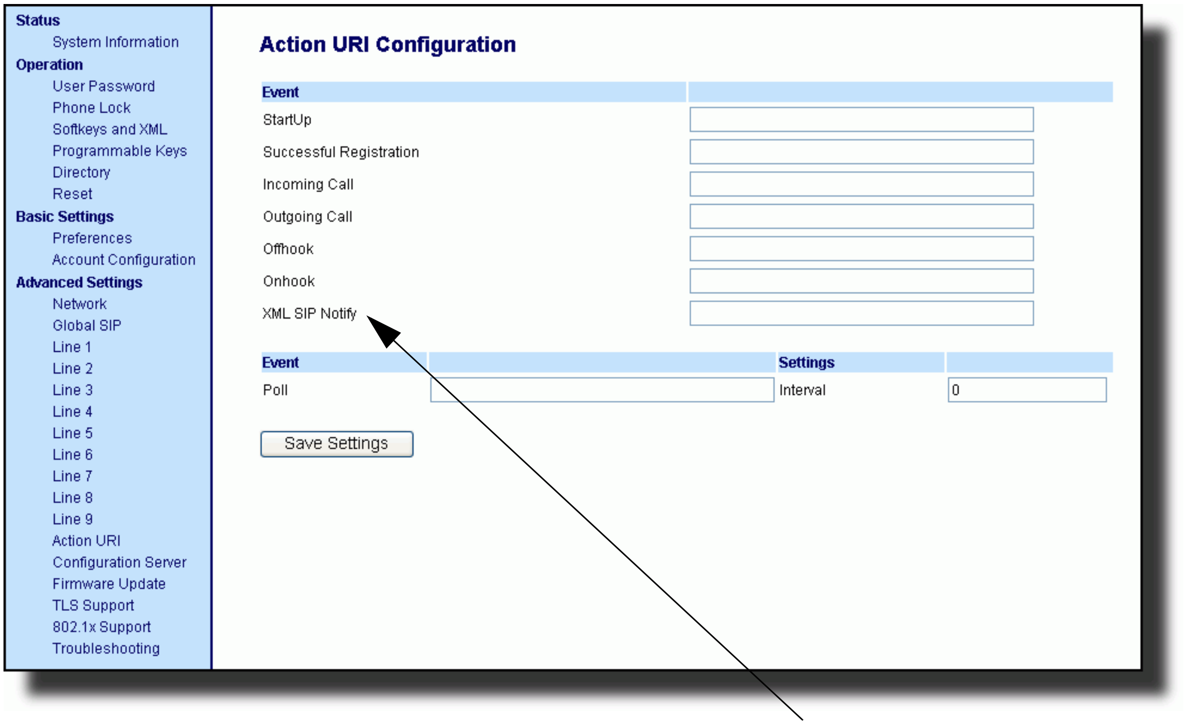
Use the following procedure to configure the Action URI for an empty XML SIP NOTIFY using the Aastra Web UI.

## Aastra Web UI

***Setting an Action URI XML SIP Notify***

1 If the content is missing in the SIP NOTIFY message received by the phone, the phone automatically uses the value you specify for the Action URI **XML SIP Notify** parameter at the path *Advanced Settings->Action URI*.

Click on **Advanced Settings->Action URI.**


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Programmable Keys
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting
Action URI Configuration
Event
StartUp
Successful Registration
Incoming Call
Outgoing Call
Offhook
Onhook
XML SIP Notify
Event
Settings
Poll
Interval
0
Save Settings

**XML SIP Notify Parameter**

2 Specify a URI to be called when an empty XML SIP NOTIFY is received by the phone.

**Note:** The **sip xml notify event** parameter at the path *Advanced Settings->Global SIP->Advanced SIP Settings* must be enabled.

3 Click Save Settings to save your changes.

## RTP and Multicast RTP via XML

The IP Phones have new XML commands an Administrator can use with the "**AastraIPPhoneExecute**" object. These commands allow the phone to send/ recieve an RTP stream to/from given multicast/unicast addresses (without involving SIP signaling). The new XML commands to use with the AastraIPPhoneExecute object in an XML application are:

- **RTPRx** (Receive (Rx) a Unicast RTP stream or stop receiving a Unicast/ Multicast RTP streams)
- **RTPTx** (Transmit (Tx) a Unicast RTP stream or stop transmitting a Unicast/ Multicast RTP streams)
- **RTPMRx** (Receive (Rx) a Multicast RTP stream)
- **RTPMTx** (Transmit (Tx) a Multicast RTP stream)

The phones support the following RTP stream format:

- G.711 mu-law CODEC
- 20 ms packet size

---

➡ **Note:** If one of the previous commands is sent to the phone which is already in a call, the phone places the current call on hold and the RTP streaming commands are performed using a new audio path.

---

### *RTPRx*

The RTPRx URI instructs the phone to **receive** a Unicast RTP stream or **stop receiving** Unicast or Multicast RTP streams. The RTPRx formats to use with the AastraIPPhoneExecute object in the URI are:

- **RTPRx:i:p:v**
- **RTPRx:Stop**

| **Where** | |
|---|---|
| **i** | Specifies the IP Address from which the stream is coming. |
| **p** | Specifies the UDP port on which to receive the RTP stream.<br>**Ensure that this is a number greater than 3100.** |
| **v** (optional) | Indicates the optional volume setting that controls the volume of the stream playout. The supplied value is an offset to the current volume setting. After the initial volume level gets set and the stream starts, you can manually change the volume level as required using this “v” option. If you do not specify the optional volume parameter, the phone uses the current volume setting on the phone as the default. |
| **Stop** | Specifies to stop any active RTP stream from being received on channel one. |

**Example**: This example receives a unicast RTP stream from 10.30.100.20 at UDP port 21000 with the voice settings at 3 levels more than the current offset.

```
<AastraIPPhoneExecute>
    <ExecuteItem URI = ”RTPRx:10.30.100.20:21000:3”>
<AastraIPPhoneExecute>
```

**Example:**
This example receives a unicast RTP stream from 10.30.100.20 at UDP port 21000 with the voice settings as used in the previous RTP stream.

```
<AastraIPPhoneExecute>
    <ExecuteItem URI = ”RTPRx:10.30.100.20:21000”>
<AastraIPPhoneExecute>
```

**Example:**
This example stops an incoming active multicast/unicast RTP stream.

```
<AastraIPPhoneExecute>
    <ExecuteItem URI=”RTPRx:Stop”>
<AastraIPPhoneExecute>
```

**Note:** Once the RTPRx command in the URI is sent to the phone, it stops the phone from listening to any previous RTPRx or RTPMRx commands. The phone starts listening based on the most recent RTPRx command received. This behavior also applies to the RTPRx:Stop and RTPMRx:Stop commands as well but does not enable any further listening.

### *RTPTx*

The RTPTx URI instructs the phone to **transmit** a Unicast RTP stream or to **stop transmitting** Unicast or Multicast RTP streams. The RTPTx formats to use with the AastraIPPhoneExecute object in the URI are:

- **RTPTx:i:p**
- **RTPTx:Stop**

| **Where** | |
|---|---|
| **i** | Specifies the IP Address to which an RTP stream is transmit ed. |
| **p** | Specifies the UDP port on which to transmit the RTP stream.<br>**Ensure that this is a number greater than 3100.** |
| **Stop** | Specifies to stop any active RTP stream from being transmitted on channel one. |

**Example**: This example sends a unicast RTP stream to 10.30.100.20 on UDP port 21000.

```
<AastraIPPhoneExecute>
     <ExecuteItem URI = ”RTPTx:10.30.100.20:21000”>
<AastraIPPhoneExecute>
```

**Example:**
This example stops an outgoing active multicast/unicast RTP stream.

```
<AastraIPPhoneExecute>
     <ExecuteItem URI=”RTPTx:Stop”>
<AastraIPPhoneExecute>
```

### *RTPMRx*

The RTPMRx URI instructs the phone to **receive** a Multicast RTP stream. The RTPMRx format to use with the AastraIPPhoneExecute object in the URI is:

- **RTPMRx:i:p:v**

| **Where** | |
|---|---|
| **i** | Specifies the multicast IP Address from which to receive an RTP stream. |
| **p** | Specifies the UDP port on which to receive the RTP stream.<br>**Ensure that this is a number greater than 3100.** |
| **v**<br>(optional) | Indicates the optional volume setting that controls the volume of the stream playout. The supplied value is an offset to the current volume setting. After the initial volume level gets set and the stream starts, you can manually change the volume level as required using this “v” option. If you do not specify the optional volume parameter, the phone uses the current volume setting on the phone as the default. |

**Example**: This example receives a multicast RTP stream from 239.0.1.20 on UDP port 21000 with the voice settings at -3 levels less than the current offset.

```
<AastraIPPhoneExecute>
    <ExecuteItem URI = ”RTPMRx:239.0.1.20:21000:-3”>
<AastraIPPhoneExecute>
```

**Example:**
This example receives a multicast RTP stream from 239.0.1.20 at UDP port 21000 with the voice settings as used in the previous RTP stream.

```
<AastraIPPhoneExecute>
    <ExecuteItem URI = ”RTPMRx:239.0.1.20:21000”>
<AastraIPPhoneExecute>
```

**Note:** Once the RTPMRx command in the URI is sent to the phone, it stops the phone from listening to any previous RTPRx or RTPMRx commands. The phone starts listening based on the most recent RTPMRx command received. This behavior also applies to the RTPRx:Stop and RTPMRx:Stop commands as well, but tbe “Stop” command does not enable any further listening.

### *RTPMTx*

The RTPMTx URI instructs the phone to transmit a Multicast RTP stream. The RTPMTx format to use with the AastraIPPhoneExecute object in the URI is:

- **RTPMTx:i:p**

| **Where** | |
|---|---|
| **i** | Specifies the Multicast IP Address to which an RTP stream is transmitted. |
| **p** | Specifies the UDP port on which to transmit the RTP stream.<br>**Ensure that this is a number greater than 3100.** |
| **Example**: This example sends a multicast RTP stream to 239.0.1.20 from UDP port 21000. | |

```
<AastraIPPhoneExecute>
    <ExecuteItem URI = ”RTPMTx:239.0.1.20:21000”>
<AastraIPPhoneExecute>
```

## Text Wrap for XML TextMenu Items

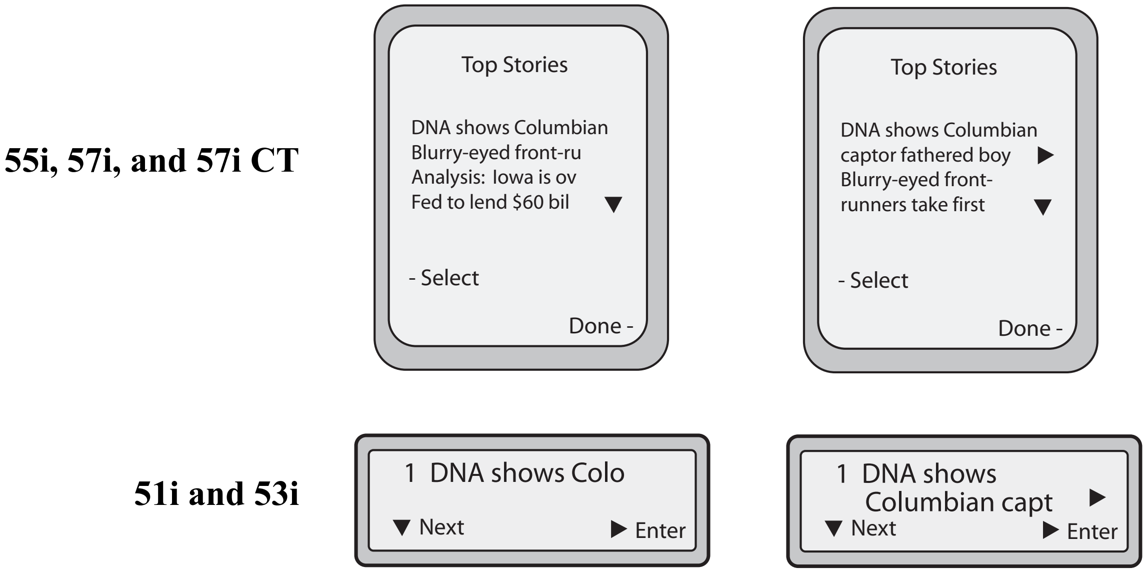
The AastraIPPhoneTextMenu object now supports text wrapping on two lines for its items. This is done using a new attribute called "**wrapList**". This attribute allows you to specify the text wrapping to an additional line rather than truncating and dropping the text.

---

**Note:** If the menu item begins with more than one large word (with no spaces or hyphens), the first full word displays on the first line truncated and the next full word displays on the next line.

---

The example below illustrates the IP Phone text wrapping prior to 2.2, and the new text wrapping in Release 2.2.


55i, 57i, and 57i CT
Top Stories
DNA shows Columbian
Blurry-eyed front-ru
Analysis: Iowa is ov
Fed to lend $60 bil ▼
- Select
Done -
Top Stories
DNA shows Columbian
captor fathered boy ▶
Blurry-eyed front-
runners take first ▼
- Select
Done -
51i and 53i
1 DNA shows Colo
▼ Next
▶ Enter
1 DNA shows
Columbian capt ▶
▼ Next
▶ Enter

**Text Wrapping Prior to Release 2.2**

**Text Wrapping in Release 2.2**

You can use the RIGHT arrow key to scroll the screen to the right to view additional text.

### *Configuring the Text Wrapping Parameter*

You use the following parameter with the XML AastraIPPhoneTextMenu object:

- **wrapList**

**Example**

```
<AastraIPPhoneTextMenu destroyOnExit’”yes” wrapList=”yes”....
.....
<AastraIPPhoneTextMenu>
```

## Non-Blocking HTTP Connections

In Release 2.2, the IP Phones support a non-blocking HTTP connection feature. This feature allows the user to continue using the phone when there is a delay during an HTTP connection while the phone is waiting for the HTTP server to respond. This feature also allows a user to abort the connection and perform other operations on the phone (which will abort the HTTP connection automatically). A user can also abort the HTTP loading by pressing the GOODBYE key while the phone is displaying “Loading Page.......”.

**Note:** This feature impacts only the HTTP calls triggered by a phone key (softkey or programmable key); the HTTP calls performed by action URIs are still blocking in Release 2.2.

## Polling Action URI

Another way to reach a phone behind a NAT/firewall is to have the phone make an XML call at periodic intervals. A new Action URI was added in Release 2.2 called **action uri poll** which commands the phone to perform an XML call at configurable intervals.

An Administrator can specify the URI to be called and specify the interval between polls using the configuration files or the Aastra Web UI. Configuration of this feature is dynamic (no reboot required).

### *Configuring Polling Action URI via the Configuration Files*

Use the following parameters to configure the polling Action URI on the IP Phones.

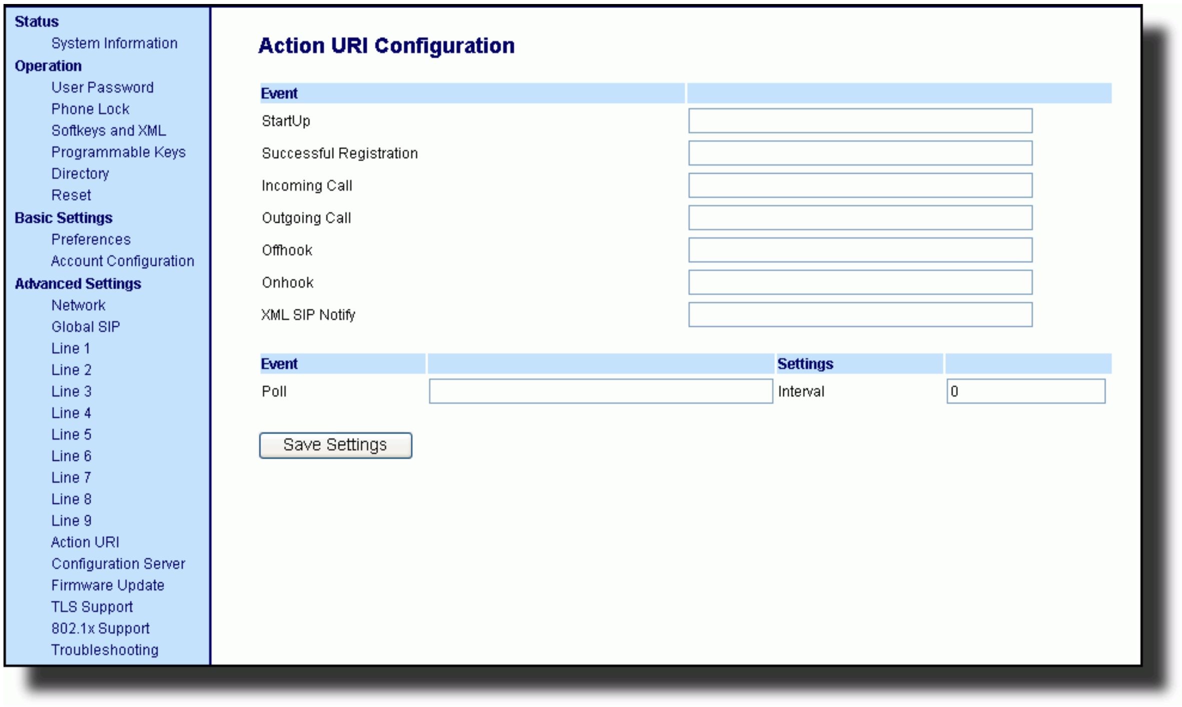
- **action uri poll**
- **action uri poll interval**

| **Parameter –**<br>*action uri poll* | **Aastra Web UI** Advanced Settings->Action URI<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the URI to be called every "action uri pool interval" seconds. |
| **Format** | HTTP(s) server path or Fully Qualified Domain Name |
| **Default Value** | N/A |
| **Range** | N/A |
| **Example** | action uri poll: http://myserver.com/myappli.xml |

| **Parameter –**<br>*action uri poll interval* | **Aastra Web UI** Advanced Settings->Action URI<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the interval, in seconds, between calls from the phone to the "action uri poll". |
| **Format** | Integer |
| **Default Value** | 0 (disabled) |
| **Range** | N/A |
| **Example** | action uri poll interval: 60 |

### *Configuring Polling Action URI via the Aastra Web UI*

Use the following procedure to configure polling Action URI using the Aastra Web UI.

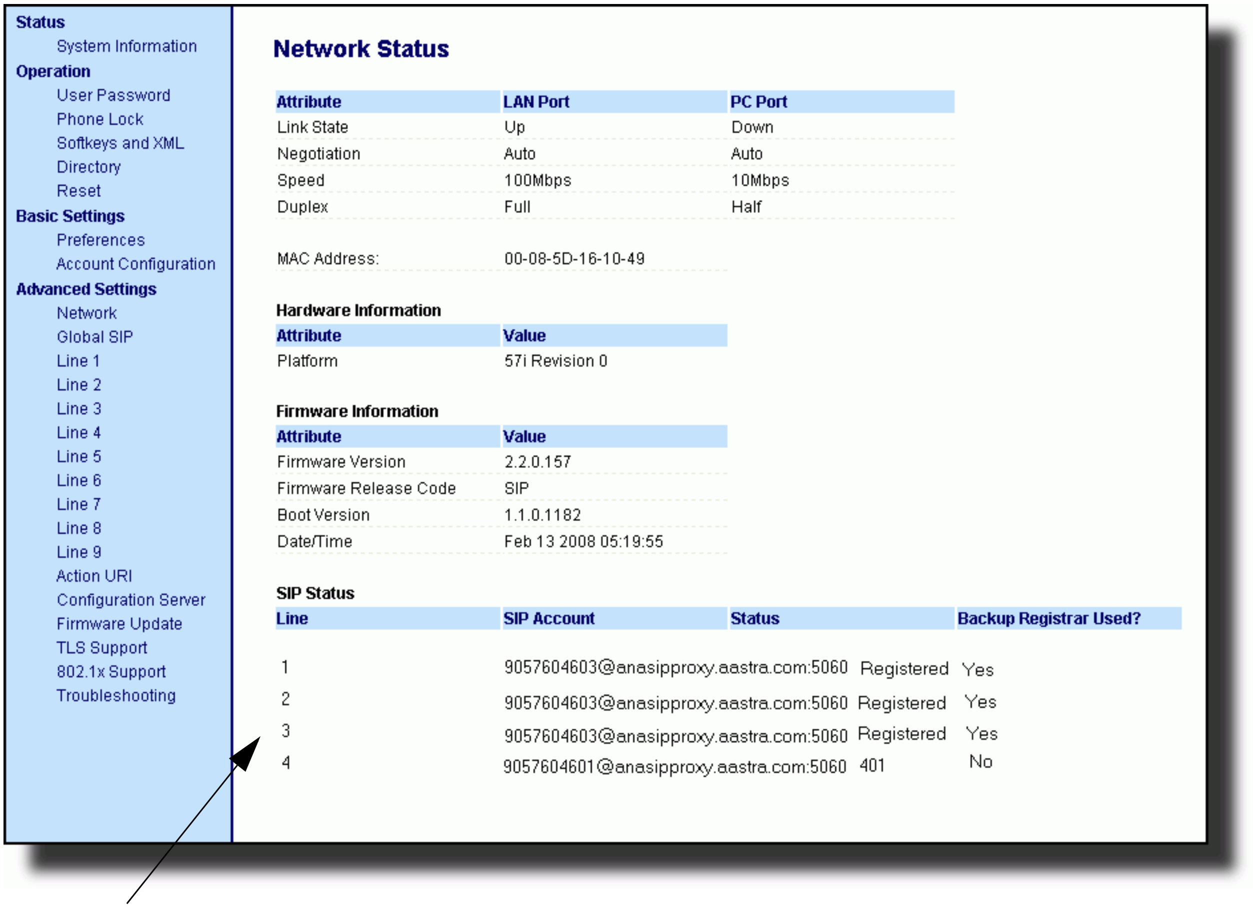
| | **Aastra Web UI** |
|---|---|
| 1 | Click on **Advanced Settings->Action URI**.<br><br> Status<br>System Information<br>Operation<br>User Password<br>Phone Lock<br>Softkeys and XML<br>Programmable Keys<br>Directory<br>Reset<br>Basic Settings<br>Preferences<br>Account Configuration<br>Advanced Settings<br>Network<br>Global SIP<br>Line 1<br>Line 2<br>Line 3<br>Line 4<br>Line 5<br>Line 6<br>Line 7<br>Line 8<br>Line 9<br>Action URI<br>Configuration Server<br>Firmware Update<br>TLS Support<br>802.1x Support<br>Troubleshooting<br>**Action URI Configuration**<br>**Event**<br>StartUp<br>Successful Registration<br>Incoming Call<br>Outgoing Call<br>Offhook<br>Onhook<br>XML SIP Notify<br>**Event** **Settings**<br>Poll Interval 0<br> Save Settings |
| 2 | In the "**Poll**" field, enter a URI to be called every "action uri pool interval" seconds. Enter the value in a URI format. For example, **http://myserver.com/myappli.xml**. |
| 3 | In the "**Interval**" field, enter the interval, in seconds, between calls from the phone to the "action uri poll". The value of "**0**" is disabled. |
| 4 | Click Save Settings to save your changes. |

# Deployability Features

## SIP Registration Status in Aastra Web UI

The IP Phones now show the SIP registration status on the IP Phone's Network Status screen in the Aastra Web UI.

If there are accounts configured on the IP Phone, their SIP status displays in the Network Status window. The 51i displays only one status line. All other model phones display the status of up to 9 lines.The following is an illustration of the Network Status screen in the Aastra Web UI with SIP status displayed.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Network Status**

| Attribute | LAN Port | PC Port |
|---|---|---|
| Link State | Up | Down |
| Negotiation | Auto | Auto |
| Speed | 100Mbps | 10Mbps |
| Duplex | Full | Half |

MAC Address: 00-08-5D-16-10-49

**Hardware Information**

| Attribute | Value |
|---|---|
| Platform | 57i Revision 0 |

**Firmware Information**

| Attribute | Value |
|---|---|
| Firmware Version | 2.2.0.157 |
| Firmware Release Code | SIP |
| Boot Version | 1.1.0.1182 |
| Date/Time | Feb 13 2008 05:19:55 |

**SIP Status**

| Line | SIP Account | Status | Backup Registrar Used? |
|---|---|---|---|
| 1 | 9057604603@anasipproxy.aastra.com:5060 | Registered | Yes |
| 2 | 9057604603@anasipproxy.aastra.com:5060 | Registered | Yes |
| 3 | 9057604603@anasipproxy.aastra.com:5060 | Registered | Yes |
| 4 | 9057604601@anasipproxy.aastra.com:5060 | 401 | No |

**SIP Status on the Network Status Screen**

The following table describes the status conditions that can display for an account(s).

| Status Condition | Desription |
|---|---|
| Registered | Displays this status on accounts that HAVE been registered with the SIP proxy server.<br>**Example**:<br>`Line SIP Account Status Backup Registrar Used?`<br>`1 9057604603@anasipproxy.aastra.com:5060 Registered Yes`<br>**where**<br>Account Number is “1”<br>SIP Account is “9057604603@anasipproxy.aastra.com” on port “5060”<br>Status is “Registered”<br>Backup registrar is used (“Yes”) |
| SIP Error Number | Displays on accounts when registration fails with the SIP proxy server.<br>**Example**:<br>`Line SIP Account Status Backup Registrar Used?`<br>`4 9057604601@anasipproxy.aastra.com:5060 401 No`<br>**where**<br>Account Number is “4”<br>SIP Account is “9057604601@anasipproxy.aastra.com” on port “5060”<br>Status is “401” - Unregistered if SIP registration fails.<br>Backup registrar is used (“No”) |

## Support for HTTP and HTTPS Configuration Servers on Non-Standard Ports

Prior to Release 2.2, the IP Phones used the default port numbers for loading configuration over HTTP (Port 80), HTTPS (Port 443) and DHCP option 66. Now the IP Phones allow an Administrator to configure the HTTP/HTTPS port number when required for configuration servers (

Two new parameters for configuring the HTTP and HTTPS port numbers are as follows:

- **http port**
- **https port**

An Administrator can configure these parameters using the configuration files, the IP Phone UI, or the Aastra Web UI.

### *Configuring HTTP and HTTPS Port Using the Configuration Files*

An Administrator can use the following parameters in the configuration files to configure the HTTP or HTTPS ports.

| **Parameter –** *http port* | **IP Phone UI:** Options->Administrator Menu-> Configuration Server->HTTP Settings<br>**Aastra Web UI:** Advanced Settings->Configuration Server-> Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the HTTP port that the server uses to load the configuration to the phone over HTTP. |
| **Format** | Integer |
| **Default Value** | 80 |
| **Range** | 1 through 65535 |
| **Example** | http port: 1025 |

| | |
|---|---|
| **Parameter –**<br>*https port* | **IP Phone UI:** Options->Administrator Menu->Configuration Server->HTTPS Settings->HTTPS Client->Download Port<br>**Aastra Web UI:** Advanced Settings->Configuration Server->Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
| **Description** | Specifies the HTTPS port that the server uses to load the configuration to the phone over HTTPS. |
| **Format** | Integer |
| **Default Value** | 443 |
| **Range** | 1 through 65535 |
| **Example** | https port: 1026 |

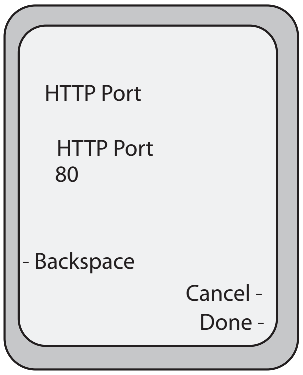
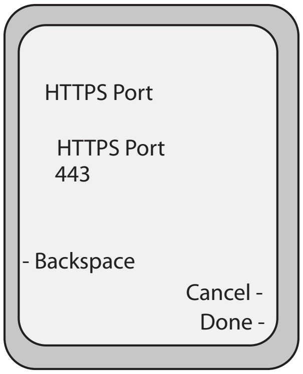
### *Configuring HTTP and HTTPS Port Using the IP Phone UI*

Use the following procedure to configure the HTTP or HTTPS port using the IP Phone UI.

**Aastra IP Phone UI**

| **Step** | **Action** |
|---|---|
| ***Configuring HTTP Port*** | |
| 1 | Press **Options->Administrator Menu**. |
| 2 | Enter your Administrator password and press **Enter**. |
| 3 | Select **Configuration Server->HTTP Settings->HTTP Port.** |

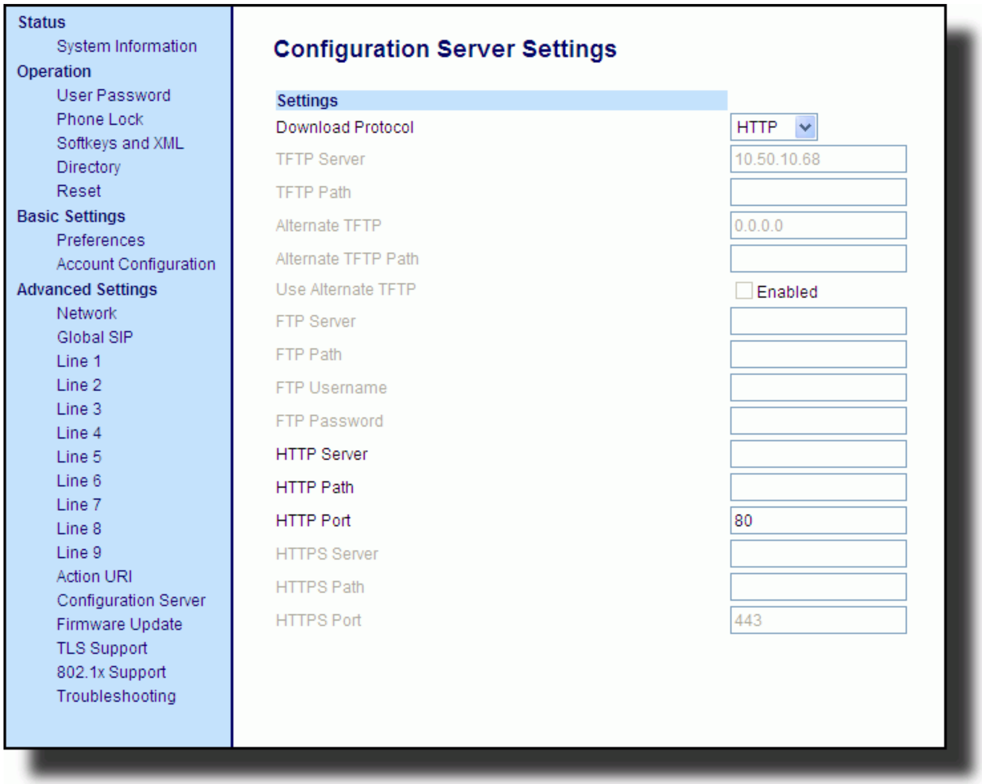
### Aastra IP Phone UI

| Step | Action |
|---|---|
| 4 | Enter the HTTP port that the server uses to load the configuration to the phone over HTTP.<br><br>HTTP Port<br>HTTP Port<br>80<br> <br>Press **Done**. |
| 5 | Press **Options** to save your changes and exit from the Options Menu. |
| ***Configuring HTTPS Port*** | |
| 1 | Press **Options->Administrator Menu**. |
| 2 | Enter your Administrator password and press **Enter**. |
| 3 | Select **Configuration Server->HTTPS Settings->HTTPS Client->Download Port.** |
| 4 | Enter the HTTPS port that the server uses to load the configuration to the phone over HTTPS.<br><br>HTTPS Port<br>HTTPS Port<br>443<br> <br>Press **Done**. |
| 5 | Press **Options** to save your changes and exit from the Options Menu. |

### *Configuring HTTP and HTTPS Port Using the Aastra Web UI*

Use the following procedure to configure the HTTP or HTTPS port using the Aastra Web UI..

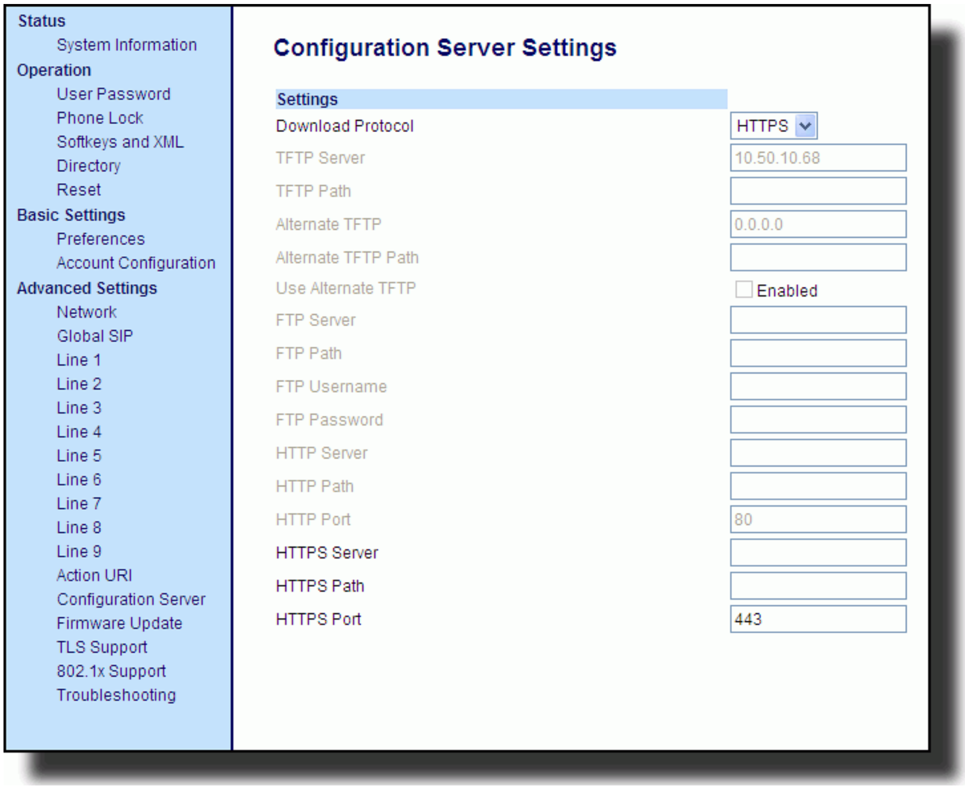
## Aastra Web UI

| | |
|---|---|
| ***Configuring HTTP Port*** | |
| 1 | Click on **Advanced Settings->Configuration Server->Settings**.<br><br> Status<br>System Information<br>Operation<br>User Password<br>Phone Lock<br>Softkeys and XML<br>Directory<br>Reset<br>Basic Settings<br>Preferences<br>Account Configuration<br>Advanced Settings<br>Network<br>Global SIP<br>Line 1<br>Line 2<br>Line 3<br>Line 4<br>Line 5<br>Line 6<br>Line 7<br>Line 8<br>Line 9<br>Action URI<br>Configuration Server<br>Firmware Update<br>TLS Support<br>802.1x Support<br>Troubleshooting<br>Configuration Server Settings<br>Settings<br>Download Protocol: HTTP<br>TFTP Server: 10.50.10.68<br>TFTP Path:<br>Alternate TFTP: 0.0.0.0<br>Alternate TFTP Path:<br>Use Alternate TFTP: ☐ Enabled<br>FTP Server:<br>FTP Path:<br>FTP Username:<br>FTP Password:<br>HTTP Server:<br>HTTP Path:<br>HTTP Port: 80<br>HTTPS Server:<br>HTTPS Path:<br>HTTPS Port: 443 |
| 2 | In the "**Download Procotol**" field, select **HTTP**. |
| 3 | In the "**HTTP Server**" field, enter the HTTP server that downloads the configuration to the phone. Enter the value in the format 0.0.0.0. For example, **10.40.50.90**. |
| 4 | In the "**HTTP Path**" field, enter the HTTP path of the HTTP server.<br>If the IP phone's configuration and firmware files are located in a sub-directory beneath the server's HTTP root directory, the relative path to that sub-directory should be entered in this field. |
| 5 | In the "**HTTP Port**" field, enter the HTTP port that the server uses to download the configuration to the phone. Default value is 80. Valid values are 1 through 65535. |
| 6 | Click Save Settings to save your changes. |

## Aastra Web UI

### *Configuring HTTPS Port*

1 Click on **Advanced Settings->Configuration Server->Settings**.



Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Configuration Server Settings**

| Settings | |
|---|---|
| Download Protocol | HTTPS |
| TFTP Server | 10.50.10.68 |
| TFTP Path | |
| Alternate TFTP | 0.0.0.0 |
| Alternate TFTP Path | |
| Use Alternate TFTP | ☐ Enabled |
| FTP Server | |
| FTP Path | |
| FTP Username | |
| FTP Password | |
| HTTP Server | |
| HTTP Path | |
| HTTP Port | 80 |
| HTTPS Server | |
| HTTPS Path | |
| HTTPS Port | 443 |

2 In the “**Download Procotol**” field, select **HTTPS**.

3 In the “**HTTPS Server**” field, enter the HTTPS server that downloads the configuration to the phone. Enter the value in the format 0.0.0.0. For example, **10.40.50.90**.

4 In the “**HTTPS Path**” field, enter the HTTPS path of the HTTPS server.

If the IP phone’s configuration and firmware files are located in a sub-directory beneath the server’s HTTPS root directory, the relative path to that sub-directory should be entered in this field.

5 In the “**HTTPS Port**” field, enter the HTTPS port that the server uses to download the configuration to the phone. Default value is 443. Valid values are 1 through 65535.

6 Click Save Settings to save your changes.

## Ability to Set TFTP and FTP Path for Configuration Servers

The IP Phones now allow the acquisition of configuration files from subdirectories when connecting to either a TFTP or FTP server. An Administrator can specify a TFTP path, an alternate TFTP path, or an FTP path for where the configuration files reside on the TFTP or FTP server. An Administrator can configure this path using the configuration files, the IP Phone UI, or the Aastra Web UI.

### *Configuring a TFTP or FTP Path Using the Configuration Files*

Use the following parameters to configure a TFTP path or FTP path on the IP Phones.

- **tftp path**
- **alternate tftp path**
- **ftp path**

| | | |
|---|---|---|
| **Parameter –**<br>*tftp path* | **Aastra Web UI**<br>**IP Phone UI**<br>**Configuration Files** | Advanced Settings-> Configuration Server->Settings<br>Options->Administrator Menu-> Configuration Server->TFTP Settings<br>aastra.cfg, <mac>.cfg |
| **Description** | Specifies the path name for which the configuration files reside on the TFTP server for downloading to the IP Phone.<br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. | |
| **Format** | String | |
| **Default Value** | N/A | |
| **Range** | Up to 64 alphanumeric characters | |
| **Example** | tftp path: configs\tftp | |

| **Parameter –**<br>*alternate tftp path* | **Aastra Web UI** Advanced Settings-> Configuration Server->Settings<br>**IP Phone UI** Options->Administrator Menu-> Configuration Server->TFTP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies a path name for which the configuration files reside on an alternate TFTP server for downloading to the IP Phone.<br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | Up to 64 alphanumeric characters |
| **Example** | alternate tftp path: configs\alternate |

| **Parameter –**<br>*ftp path* | **Aastra Web UI** Advanced Settings-> Configuration Server->Settings<br>**IP Phone UI** Options->Administrator Menu-> Configuration Server->FTP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies a path name for which the configuration files reside on an FTP server for downloading to the IP Phone.<br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | Up to 64 alphanumeric characters |
| **Example** | ftp path: configs\ftp |

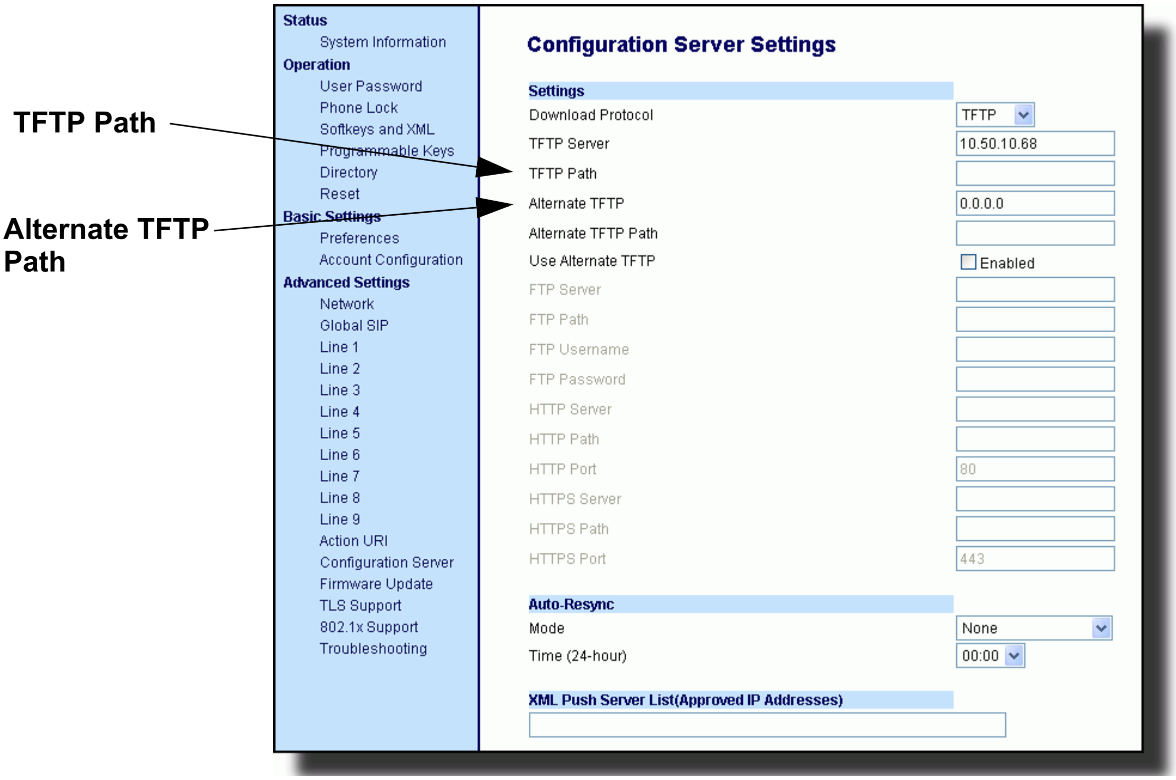
### *Configuring a TFTP or FTP Path Using the Aastra Web UI*

Use the following procedure to configure a TFTP path or FTP path on the IP Phones..

## Aastra Web UI

### *Configuring TFTP and Alternate TFTP Path*

1 Click on **Advanced Settings->Configuration Server->Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Programmable Keys
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**TFTP Path**

**Alternate TFTP Path**

Configuration Server Settings

Settings
Download Protocol: TFTP
TFTP Server: 10.50.10.68
TFTP Path:
Alternate TFTP: 0.0.0.0
Alternate TFTP Path:
Use Alternate TFTP: ☐ Enabled
FTP Server:
FTP Path:
FTP Username:
FTP Password:
HTTP Server:
HTTP Path:
HTTP Port: 80
HTTPS Server:
HTTPS Path:
HTTPS Port: 443

Auto-Resync
Mode: None
Time (24-hour): 00:00

XML Push Server List(Approved IP Addresses)

2 In the "**TFTP Path**" field enter the path name for which the configuration files reside on the TFTP server for downloading to the IP Phone.

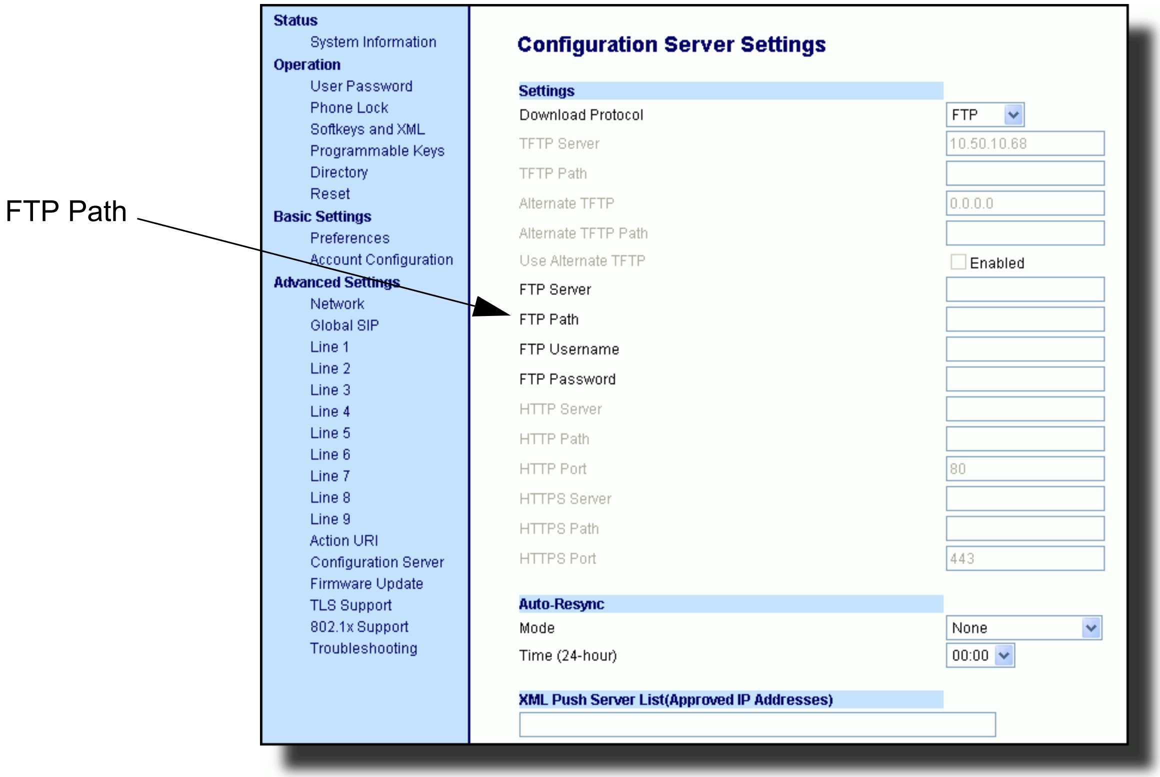
**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. You can enter up to 64 alphanumeric characters.

3 If an alternate TFTP server is used in the network, in the "**Alternate TFTP Path**" field enter the path name for which the configuration files reside on the alternate TFTP server for downloading to the IP Phone.

**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. You can enter up to 64 alphanumeric characters.

4 Click [Save Settings] to save your changes.

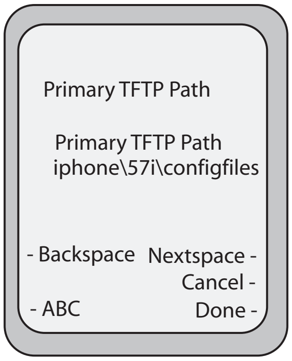
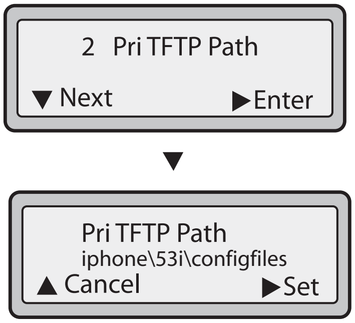
## Aastra Web UI

| | |
|---|---|
| ***Configuring FTP Path*** | |
| 1 | Click on **Advanced Settings->Configuration Server->Settings**.<br><br> FTP Path<br>Status<br>System Information<br>Operation<br>User Password<br>Phone Lock<br>Softkeys and XML<br>Programmable Keys<br>Directory<br>Reset<br>Basic Settings<br>Preferences<br>Account Configuration<br>Advanced Settings<br>Network<br>Global SIP<br>Line 1<br>Line 2<br>Line 3<br>Line 4<br>Line 5<br>Line 6<br>Line 7<br>Line 8<br>Line 9<br>Action URI<br>Configuration Server<br>Firmware Update<br>TLS Support<br>802.1x Support<br>Troubleshooting<br>**Configuration Server Settings**<br>**Settings**<br>Download Protocol: FTP<br>TFTP Server: 10.50.10.68<br>TFTP Path:<br>Alternate TFTP: 0.0.0.0<br>Alternate TFTP Path:<br>Use Alternate TFTP: ☐ Enabled<br>FTP Server:<br>FTP Path:<br>FTP Username:<br>FTP Password:<br>HTTP Server:<br>HTTP Path:<br>HTTP Port: 80<br>HTTPS Server:<br>HTTPS Path:<br>HTTPS Port: 443<br>**Auto-Resync**<br>Mode: None<br>Time (24-hour): 00:00<br>**XML Push Server List(Approved IP Addresses)** |
| 2 | In the "**FTP Path**" field, enter the path name for which the configuration files reside on the FTP server for downloading to the IP Phone.<br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. You can enter up to 64 alphanumeric characters. |
| 3 | Click Save Settings to save your changes. |

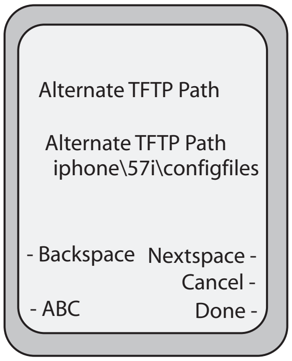
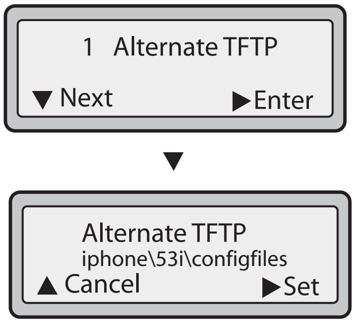
### *Configuring a TFTP or FTP Path Using the IP Phone UI*

Use the following procedure to configure a TFTP or FTP path using the IP Phone UI.

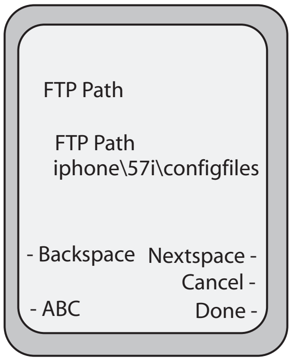
**Aastra IP Phone UI**

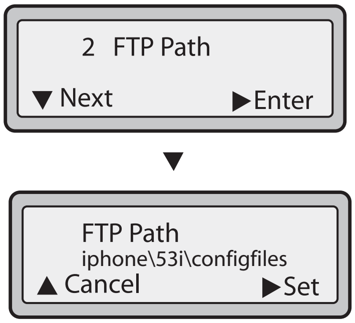
| **Step** | **Action** |
|---|---|
| ***Configuring TFTP Path*** | |
| 1 | Press **Options->Administrator Menu**. |
| 2 | Enter your Administrator password and press **Enter**. |
| 3 | Select **Configuration Server->TFTP Settings->Primary TFTP Path.** |
| 4 | Enter the enter the path name for which the configuration files reside on the primary TFTP server for downloading to the IP Phone. To enter the “\” character, press the “#” key several times to cycle through the characters until you see the “\” character.<br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. You can enter up to 64 alphanumeric characters.<br><br>Primary TFTP Path<br>Primary TFTP Path<br>iphone\57i\configfiles<br> <br>**55i/57i/57i CT**<br><br>2 Pri TFTP Path<br> <br>Pri TFTP Path<br>iphone\53i\configfiles<br> <br>**51i/53i**<br>**For 55i, 57i, and 57i CT:**<br>Press **BACKSPACE** to delete characters.<br>Press **ABC** to toggle between upper and lower case letters.<br>Press **NEXTSPACE** to add a blank space.<br>Press **CANCEL** to cancel the entry for the TFTP path.<br>**For 51i, and 53i:**<br>Press **ENTER** to display the Primary TFTP Path screen.<br>Press **NEXT** to move to the next option in the TFTP Settings Menu.<br>Press **CANCEL** to cancel the entry.<br>Press **SET** to save the entry for the TFTP Path. |

## Aastra IP Phone UI

| Step | Action |
|---|---|
| 5 | Press **DONE** to save the entry for the TFTP Path to the phone's configuration. |
| ***Configuring Alternate TFTP Path*** | |
| 1 | Press **Options->Administrator Menu**. |
| 2 | Enter your Administrator password and press **Enter**. |
| 3 | Select **Configuration Server->TFTP Settings->Alternate TFTP Path.** |
| 4 | Enter the enter the path name for which the configuration files reside on the alternate TFTP server for downloading to the IP Phone**.** To enter the "\" character, press the "#" key several times to cycle through the characters until you see the "\" character<br><br>**Note:** Enter the path name in the form *folderX\folderX\folderX*. For example, ***ipphone\57i\configfiles***. You can enter up to 64 alphanumeric characters.<br><br> Alternate TFTP Path<br>Alternate TFTP Path<br>- Backspace<br>Nextspace -<br>Cancel -<br>- ABC<br>Done -<br>iphone\57i\configfiles<br>**55i/57i/57i CT**<br><br> 1 Alternate TFTP<br>▼ Next<br>▶Enter<br>▼<br>Alternate TFTP<br>▲ Cancel<br>▶Set<br>iphone\53i\configfiles<br>**51i/53i**<br><br>**For 55i, 57i, and 57i CT:**<br>Press **BACKSPACE** to delete characters.<br>Press **ABC** to toggle between upper and lower case letters.<br>Press **NEXTSPACE** to add a blank space.<br>Press **CANCEL** to cancel the entry for the TFTP path.<br><br>**For 51i, and 53i:**<br>Press **ENTER** to display the Alternate TFTP Path screen.<br>Press **NEXT** to move to the next option in the TFTP Settings Menu.<br>Press **CANCEL** to cancel the entry.<br>Press **SET** to save the entry for the Alternate TFTP Path. |

## Aastra IP Phone UI

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>5</td><td>Press <b>DONE</b> to save the entry for the Alternate TFTP Path to the phone’s configuration.</td></tr>
<tr><td colspan="2"><b><i>Configuring FTP Path</i></b></td></tr>
<tr><td>1</td><td>Press <b>Options->Administrator Menu</b>.</td></tr>
<tr><td>2</td><td>Enter your Administrator password and press <b>Enter</b>.</td></tr>
<tr><td>3</td><td>Select <b>Configuration Server->FTP Settings->FTP Path.</b></td></tr>
<tr><td>4</td><td>Enter the enter the path name for which the configuration files reside on the FTP server for downloading to the IP Phone. For example, <b>config\ftp.</b> To enter the “\” character, press the “#” key several times to cycle through the characters until you see the “\” character<br><br><b>Note:</b> Enter the path name in the form <i>folderX\folderX\folderX</i>. For example, <b><i>ipphone\57i\configfiles</i></b>. You can enter up to 64 alphanumeric characters.<br><br>


FTP Path<br>iphone\57i\configfiles<br>
<b>55i/57i/57i CT</b><br>


FTP Path<br>iphone\53i\configfiles<br>
<b>51i/53i</b><br>
<b>For 55i, 57i, and 57i CT:</b><br>Press <b>BACKSPACE</b> to delete characters.<br>Press <b>ABC</b> to toggle between upper and lower case letters.<br>Press <b>NEXTSPACE</b> to add a blank space.<br>Press <b>CANCEL</b> to cancel the entry for the FTP path.<br><b>For 51i, and 53i:</b><br>Press <b>ENTER</b> to display the FTP Path screen.<br>Press <b>NEXT</b> to move to the next option in the FTP Settings Menu.<br>Press <b>CANCEL</b> to cancel the entry.<br>Press <b>SET</b> to save the entry for the FTP Path.</td></tr>
<tr><td>5</td><td>Press <b>DONE</b> to save the entry for the FTP Path to the phone’s configuration.</td></tr>
</table>

# NAT Traversal Features

## Configurable SIP and TLS Source Ports

A System Administrator can now configure the SIP and TLS source ports on the IP Phone. Previously, the IP phone used default values (**5060** for UDP/TCP and **5061** for TLS). The two new parameters for configuring the SIP and TLS source ports are:

- **sip local port**
- **sip local tls port**

You can configure the SIP and TLS source ports using the configuration files or the Aastra Web UI. **After configuring these parameters, you must reboot the phone.**

If NAT is disabled, the port number also shows in the VIA and Contact SIP headers.

If you enable NAT, the phone uses the NAT port number (and NAT IP address) in the Via and Contact SIP headers of SIP messages, but still use the configured source port.

---

➡ **Note:** By default, the IP phones use symmetric UDP signaling for outgoing UDP SIP messages. When symmetric UDP is enabled, the IP phone generates and listens for UDP messages using port 5060.If symmetric UDP signaling is disabled, the phone sends from random ports but it listens on the configured SIP local port.

---

## *Configuring SIP and TLS Source Ports Using the Configuration Files*

| **Parameter –**<br>*sip local port* | **Aastra Web UI:** Advanced Settings->Global SIP-> Advanced SIP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the local source port (UDP/TCP) from which the the phone sends SIP messages |
| **Format** | Numeric |
| **Default Value** | 5060 |
| **Range** | Greater than 1024 and less than 65535<br>**Notes**:<br>**1.** It is recommended that you avoid the conflict RTP port range in case of a UDP transport.<br>**2.** By default, the IP phones use symmetric UDP signaling for outgoing UDP SIP messages. When symmetric UDP is enabled, the IP phone generates and listens for UDP messages using port 5060.If symmetric UDP signaling is disabled, the phone sends from random ports but it listens on the configured SIP local port. |
| **Example** | sip local port: 5060 |

| **Parameter –**<br>*sip local tls port* | **Aastra Web UI:** Advanced Settings->Global SIP-> Advanced SIP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the local source port (SIPS/TLS) from which the phone sends SIP messages. |
| **Format** | Numeric |
| **Default Value** | 5061 |
| **Range** | Greater than 1024 and less than 65535<br>**Note:** It is recommended that you avoid the conflict with any TCP ports being used. For example: WebUI HTTP server on 80/tcp and HTTPS on 443/tcp. |
| **Example** | sip local tls port: 5061 |

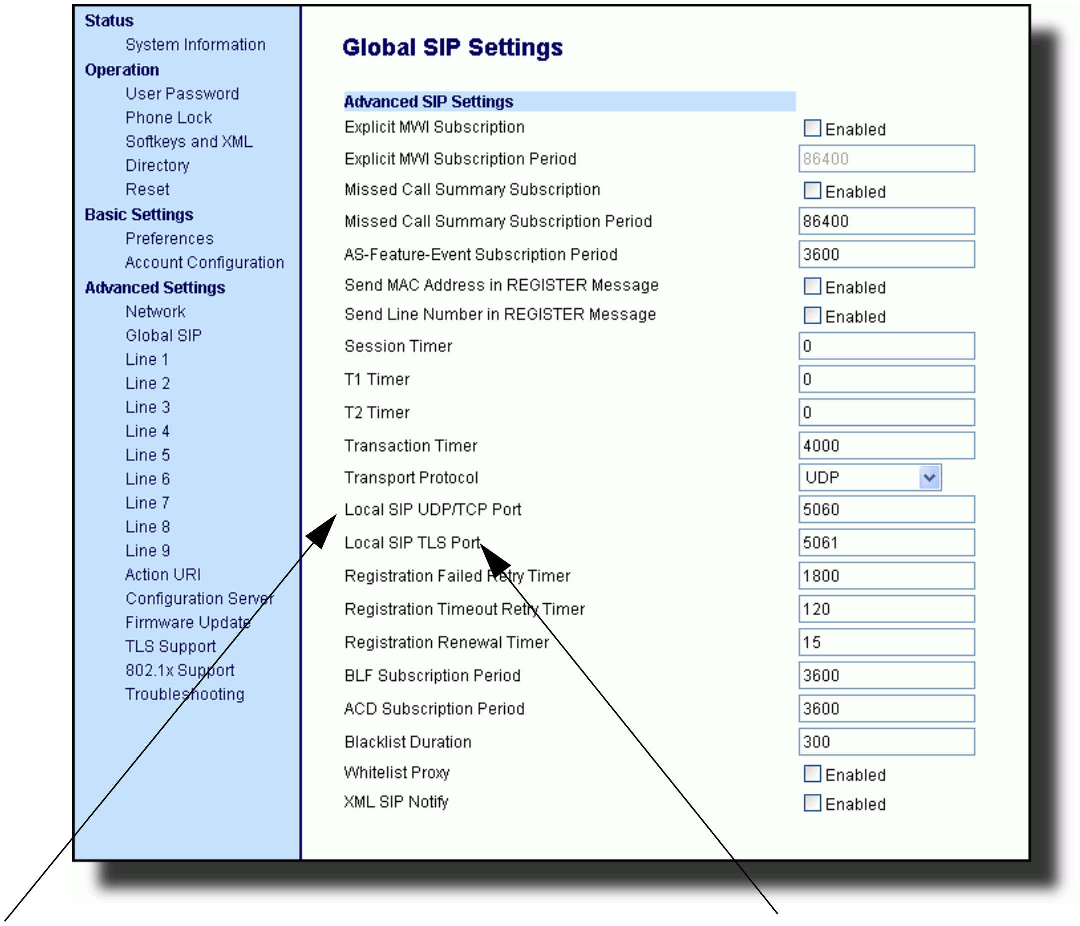
### *Configuring SIP and TLS Source Ports Using the Aastra Web UI*

Use the following procedure to configure SIP and TLS source ports using the Aastra Web UI..

## Aastra Web UI

1 Click on **Advanced Settings->Global SIP->Advanced SIP Settings.**

.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Global SIP Settings**

**Advanced SIP Settings**

Explicit MWI Subscription ☐ Enabled
Explicit MWI Subscription Period 86400
Missed Call Summary Subscription ☐ Enabled
Missed Call Summary Subscription Period 86400
AS-Feature-Event Subscription Period 3600
Send MAC Address in REGISTER Message ☐ Enabled
Send Line Number in REGISTER Message ☐ Enabled
Session Timer 0
T1 Timer 0
T2 Timer 0
Transaction Timer 4000
Transport Protocol UDP
Local SIP UDP/TCP Port 5060
Local SIP TLS Port 5061
Registration Failed Retry Timer 1800
Registration Timeout Retry Timer 120
Registration Renewal Timer 15
BLF Subscription Period 3600
ACD Subscription Period 3600
Blacklist Duration 300
Whitelist Proxy ☐ Enabled
XML SIP Notify ☐ Enabled

**"Local SIP UDP/TCP Port" Parameter**

**"Local SIP TLS Port" Parameter**

2 The "**Local SIP UDP/TCP Port**" field has a default value of **5060**. Change this value if required to a value greater than 1024 and less than 65535.

**Note:** It is recommended that you avoid the conflict RTP port range in case of a UDP transport.

| | **Aastra Web UI** |
|---|---|
| 3 | The “**Local SIP TLS Port**” field has a default value of **5061**. Change this value if required to a value greater than 1024 and less than 65535.<br>**Note:** It is recommended that you avoid the conflict with any TCP ports being used. For example: WebUI HTTP server on 80/tcp and HTTPS on 443/tcp. |
| 4 | Click Save Settings to save your changes. |

## RPORT Support

The Session Initiation Protocol (SIP) operates over UDP and TCP. When used with UDP, responses to requests are returned to the source address from which the request came, and returned to the port written into the topmost “Via” header of the request. However, this behavior is not desirable when the client is behind a Network Address Translation (NAT) or firewall.

A new parameter created for the “Via” header called “**Rport**” in RFC 3581, allows a client to request that the server send the response back to the source IP address **and** the port from which the request came.

When you enable “Rport, the phone always uses symmetric signaling (listens on the port used for sending requests).

An Administrator can configure “**Rport**” using the configuration files or the Aastra Web UI.

### *Configuring Rport Using the Configuration Files*

Use the following parameter to configure Rport on your phone.

- **sip rport**

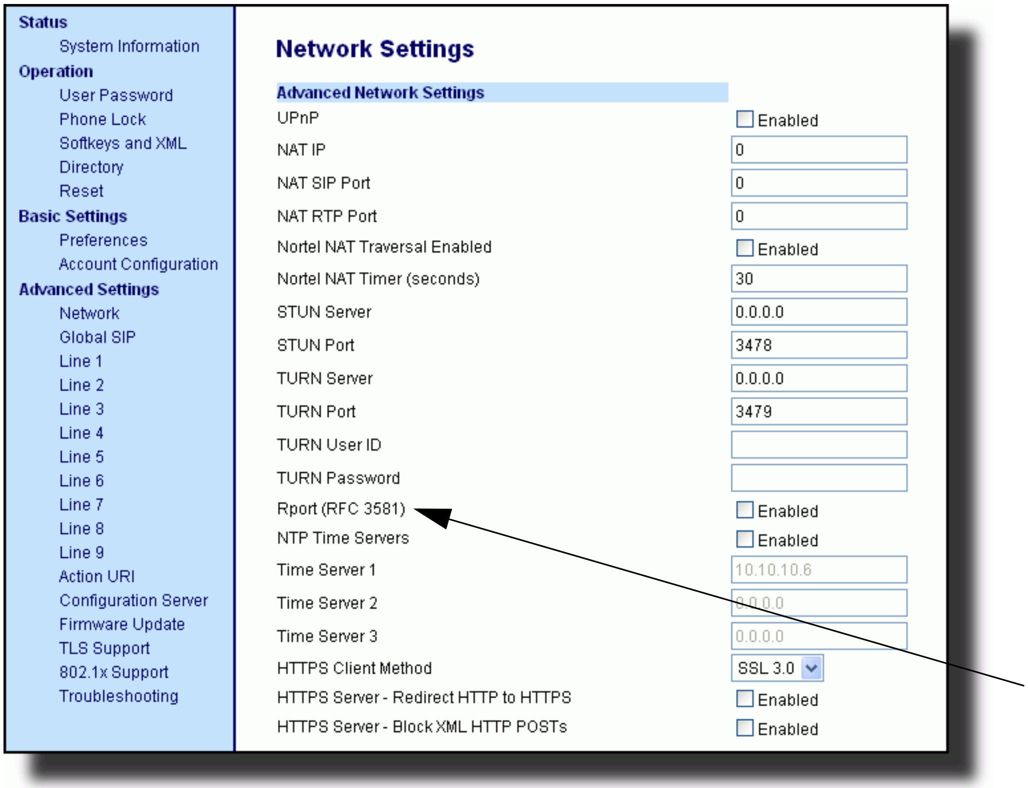
| **Parameter –**<br>*sip rport* | **Aastra Web UI:** Advanced Settings->Network-> Advanced Network Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Allows you to enable (1) or disable (0) the use of Rport on the IP phone.<br>“Rport” in RFC 3581, allows a client to request that the server send the response back to the source IP address **and** the port from which the request came. |
| **Format** | Boolean |
| **Default Value** | 0 |
| **Range** | 0 (disable)<br>1 (enable) |
| **Example** | sip rport: 1 |

### *Configuring Rport Using the Aastra Web UI*

Use the following procedure to configure Rport on your phone using the Aastra Web UI.

## Aastra Web UI

1 Click on **Advanced Settings->Network->Advanced Network Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Network Settings**

| Advanced Network Settings | |
|---|---|
| UPnP | ☐ Enabled |
| NAT IP | 0 |
| NAT SIP Port | 0 |
| NAT RTP Port | 0 |
| Nortel NAT Traversal Enabled | ☐ Enabled |
| Nortel NAT Timer (seconds) | 30 |
| STUN Server | 0.0.0.0 |
| STUN Port | 3478 |
| TURN Server | 0.0.0.0 |
| TURN Port | 3479 |
| TURN User ID | |
| TURN Password | |
| Rport (RFC 3581) | ☐ Enabled |
| NTP Time Servers | ☐ Enabled |
| Time Server 1 | 10.10.10.6 |
| Time Server 2 | 0.0.0.0 |
| Time Server 3 | 0.0.0.0 |
| HTTPS Client Method | SSL 3.0 |
| HTTPS Server - Redirect HTTP to HTTPS | ☐ Enabled |
| HTTPS Server - Block XML HTTP POSTs | ☐ Enabled |

**Rport Parameter**

2 In the "Advanced Network Settings" section, enable the "**Rport (RFC3581**" field by checking the check box. (Disable Rport by unchecking the box).

"Rport" in RFC 3581, allows a client to request that the server send the response back to the source IP address **and** the port from which the request came.

3 Click Save Settings to save your changes.

## BroadSoft Interoperability Features

### CMS Support

The IP phones now support HTTP/HTTPS digest authentication as defined in RFC 2617. (The HTTP client supports digest authentication; the HTTP server does not; the HTTP server supports basic authentication). This feature allows the phones to interoperate with Broadsoft's CMS phone configuration tool.

Using the configuration files, you can enable/disable the following parameter to display a LOG IN softkey which allows the HTTP/HTTPS server to perform digest authentication:

- **http digest force login** - specifies whether or not to display the LOG IN softkey on the IP Phone UI screen. Valid values are **0** (disabled) or **1** (enabled). Default is **0** (disabled).

If the "**http digest force login**" parameter is set to **1** (enabled), after the phone boots, the LOG IN softkey displays on the phone's LCD. If the user presses this softkey, a username/password screen displays, allowing the user to enter the configured username and password that is sent to the HTTP/HTTPS server for digest authentication by the server. By default, username is "**aastra**" and password is "**aastra**". You can enter the username and password in two ways:

- Using the configuration files, you can change the default values for the following parameters:
  - **http digest username -** specifies the username to use for HTTP/HTTPS digest authentication.
  - **http digest password** - specifies the password to use for HTTP/HTTPS digest authentication.
- By enabling the "**http digest force login**" parameter (setting to 1) - the phone displays the LOG IN key so the user can enter the default username/password via the IP Phone UI.

### *Configuring HTTP/HTTPS Digest Authentication Using the Configuration Files*

Use the following parameters to configure HTTP/HTTPS Digest Authentication on the phone.

| **Parameter –**<br>*http digest username* | **Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the username to use for HTTP/HTTPS digest authentication.. The server uses this username for authentication purposes when loading configuration to the phone over HTTP/HTTPS. This parameter initiates a "Username/Password" screen after pressing the **Log In** softkey.<br>**Notes**:<br>**1.** The Username field accepts special characters, such as, @, #, %, =, _, etc. You can also specify domain names (i.e., user@domain).<br>**2.** You must reboot the phone after setting the HTTP/HTTPS digest authentication parameters. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | Up to 40 alphanumeric characters |
| **Example** | http digest username: mysuername |

| **Parameter –**<br>*http digest password* | **Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the password to use for HTTP/HTTPS digest authentication.. The server uses this password for authentication purposes when loading configuration to the phone over HTTP/HTTPS. This parameter initiates a "Username/Password" screen after pressing the **Log In** softkey.<br>**Notes**:<br>**1.** The Password field accepts special characters, such as, @, #, %, =, _, etc.<br>**2.** You must reboot the phone after setting the HTTP/HTTPS digest authentication parameters. |
| **Format** | String |
| **Default Value** | N/A |
| **Range** | Up to 20 alphanumeric characters |
| **Example** | http digest password: mypassword |

| **Parameter –**<br>*http digest force login* | **Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Enables and disables the display of a LOGIN key on the phone's idle screen.<br>**Note:** After the server has authenticated the phone, this parameter must be set to "**0**" in order for the server to send the default profile to the phone. |
| **Format** | Boolean |
| **Default Value** | 0 (disable) |
| **Range** | 0 (disable)<br>1 (enable) |
| **Example** | http digest force login: 1 |

### *How it Works with the BroadSoft CMS Tool*

If you enable the HTTP/HTTPS digest authentication feature, the phone behaves as follows with the BroadSoft CMS tool:

1. Factory default the phone.
2. Configure the HTTP or HTTPS server (specify the HTTP or HTTPS server, path, and port).
3. Restart the phone.

   The first time the phone reboots, the phone is challenged by the server. The phone sends the default username of "**aastra**" and the default password of "**aastra**" to the server.

   The server sends the default profile to the phone. This profile includes the information "**http digest force login: 1**".When the phone receives the profile, it displays the "**Log In**" key on the IP Phone UI's idle screen.

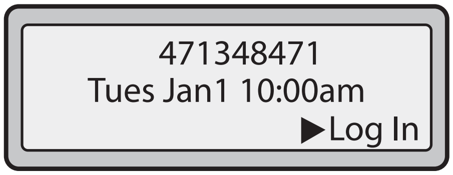
4. Press the "**Log In**" key to displays the username/password screen.

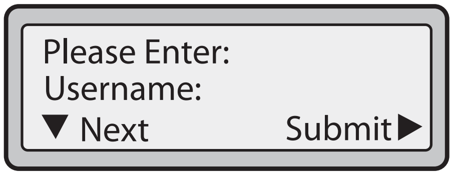
---

**Note:** On the 55i, 57i, and 57i CT, you use the **Log In** softkey to log in. On the 51i, and 53i, you press the **right arrow** key to log in.

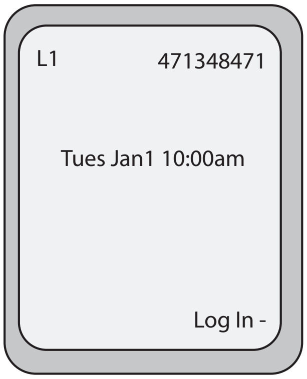
---

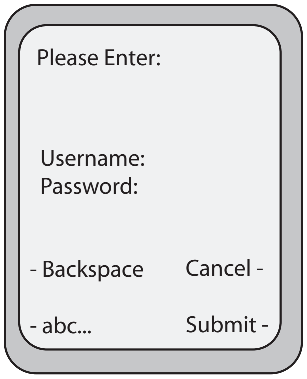
### 51i and 53i Login Screens


471348471
Tues Jan1 10:00am
▶Log In


Please Enter:
Username:
▼ Next Submit▶

### 55i, 57i, and 57i CT Login Screens


L1 471348471
Tues Jan1 10:00am
Log In -


Please Enter:
Username:
Password:
- Backspace Cancel -
- abc... Submit -

5. Enter a username in the "**Username**" field (up to 40 characters) and a password in the "**Password**" field (up to 20 characters).

---

**Note:** The "**Username"** and "**Password"** fields accept special characters, such as, @, #, %, =, _, etc. You can also specify domain names in the **Username** field (i.e., user@domain).

---

6. After entering the username and password, press **Submit**.
The phone attempts to authenticate with the server. If successful, the phone reboots and loads the user configuration. If unsuccessful, the phone displays "*Authentication Failed*".

## Server-Side Do Not Disturb (DND), Call Forward (CFWD) , and Automatic Call Distribution (ACD) Support

The IP phones now support server-side DND, CFWD, and ACD feature events.This feature is called “as-feature-event” and works with the DND, CFWD, and ACD keys.

**Notes**:
**1.** The 51i supports server-side DND and CFWD only.
**2.** The DND, CFWD, and ACD server-side feature is not applicable to the CT handset.

This feature is configurable using the configuration files or the Aastra Web UI.

### *How it Works on the Phone UI*

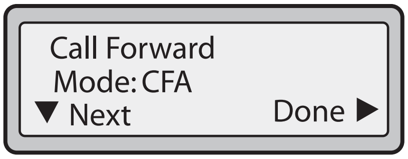
When you enable the “as-feature-event” on the phone, AND you activate a DND, CFWD, and/or ACD key, pressing the key performs as follows:

- If the key is configured for an account on the phone, the server applies DND, CFWD or ACD to that account. (for information about CFWD and DND account configuration, see the section, “Account-Based Do Not Disturb (DND) and Call Forward (CFWD)” on page 6).
- If the key is “custom” configured, a screen displays on the phone allowing the user to choose the account to apply DND or CFWD. (for information about CFWD and DND custom configuration, see the section, “Account-Based Do Not Disturb (DND) and Call Forward (CFWD)” on page 6).
- A solid “Message Waiting Indicator” (MWI) indicates if one line/account has DND or CFWD enabled, and the LED next to the DND/CFWD key is ON. A status displays on the LCD that indicates the status of the line in focus (for example, the status of CFWD could be “Call Forward Busy” (CFWDB) or “Call Forward No Answer” (CFWDNA).

**Note:** If the ACD key is configured on the phone, and the “as-feature-event” is not enabled, the phones uses the ACD icons and LED behavior from a Sylantro server instead.

When you press the DND, CFWD, or ACD key, only one attempt is made to enable/disable the "as-feature-event" feature on the server. The message "*Trying*" displays on the phone's LCD after pressing the key. If the attempt is successful, the idle screen displays. If the attempt is unsuccessful, the message "*Failed*" displays. The user can press the softkey again to re-attempt the feature if required.

The following screen displays on the IP Phone UI for server-side call forwarding:

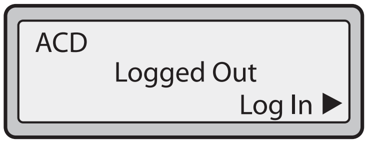


Call Forward
Mode: CFA
▼ Next Done ▶

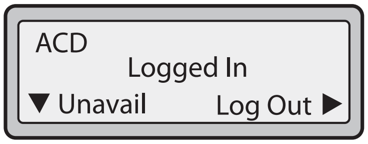
For server-side ACD, when you press the ACD softkey, the screen that displays is dependant on the state of the ACD subscription. Possible sttate for ACD are::

- **Logged Out -** User has the option of logging in.
- **Logged In -** User has the option of logging out or making the phone unavailable.
- **Unavailable -** User has the option of logging out or making the phone available.

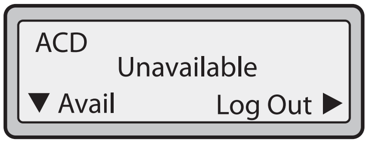
### ACD Screen for 53i



ACD
Logged Out
Log In ▶

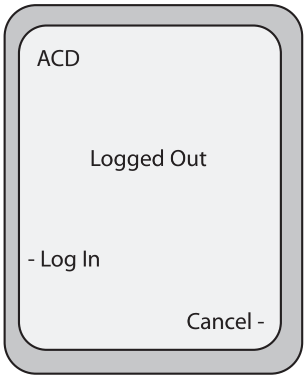


ACD
Logged In
▼ Unavail Log Out ▶

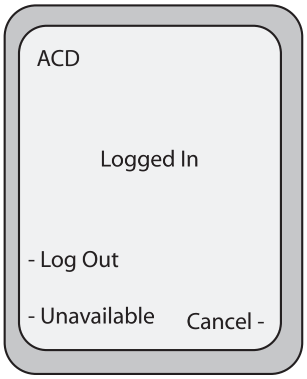


ACD
Unavailable
▼ Avail Log Out ▶

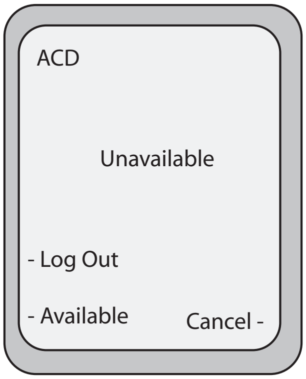
### ACD Screen for 55i, 57i, and 57i CT



ACD
Logged Out
- Log In
Cancel -



ACD
Logged In
- Log Out
- Unavailable Cancel -



ACD
Unavailable
- Log Out
- Available Cancel -

---

➡ **Note: IMPORTANT!**

If DND and CFWD are configured to use “**Account**” mode on the IP Phone, pressing the DND and CFWD keys apply to the account in focus as described in the section, “Account-Based Do Not Disturb (DND) and Call Forward (CFWD)”.

If ACD is configured on the phone, the ACD softkey applies to the line for which the key is configured. The ACD softkey must be configured for the first line of an account. For example, if account 2 has line 3 and line 4 you must configure the ACD softkey for line 3.

---

### *Configuring Server-Side DND, CFWD, and ACD Using the Configuration Files*

If the phone-side features of the DND, CFWD, and ACD keys are enabled, the phone uses the existing parameter values for these keys. If the server-side features are enabled, the phone saves the state of the features from the server on the phone.

Use the following parameters to enable/disable the server-side "as-feature-event" on the IP Phone:

- **sip lineN as-feature-event subscription**
- **sip as-feature-event subscription period**

| **Parameter –**<br>*sip lineN as-feature-event subscription* | **Aastra Web UI:** Advanced Settings->LineN-> Advanced SIP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Enables or disables the specified line with the BroadSoft's server-side DND, CFWD, or ACD features. |
| **Format** | Boolean |
| **Default Value** | 0 (disable) |
| **Range** | 0 (disable)<br>1 (enable) |
| **Example** | sip line1 as-feature-event subscription: 1 |

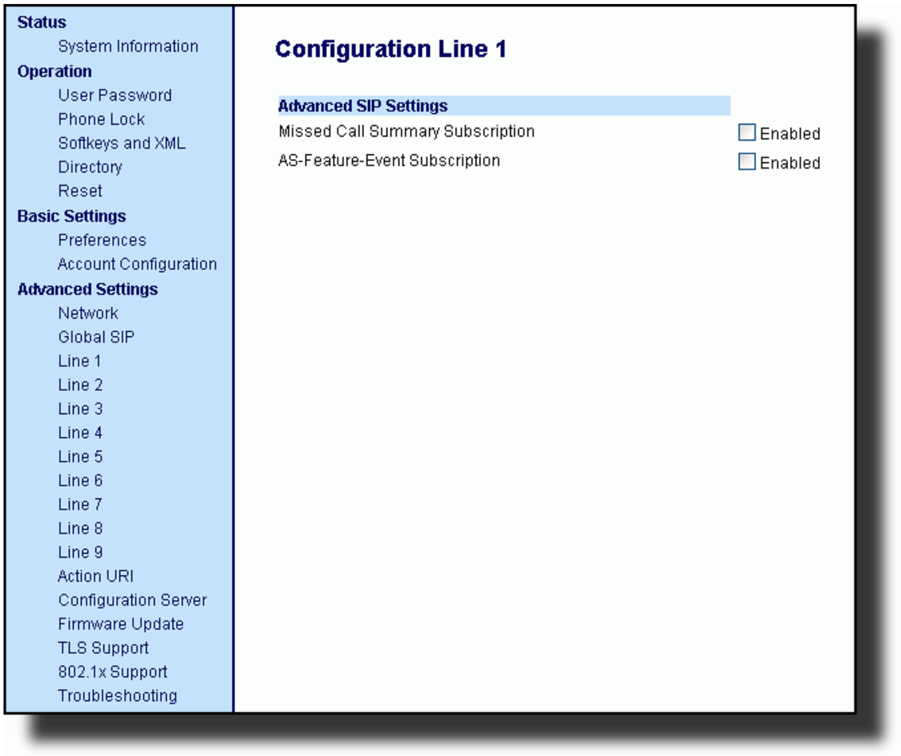
| **Parameter –**<br>*sip as-feature-event subscription period* | **Aastra Web UI:** Basic Settings->Global SIP-> Advanced SIP Settings<br>**Configuration Files** aastra.cfg, <mac>.cfg |
|---|---|
| **Description** | Specifies the amount of time, in seconds, between resubscribing. If the phone does not resubscribe in the time specified for this parameter, it loses subscription. |
| **Format** | Integer |
| **Default Value** | 3600 |
| **Range** | 5 to 2147483648 |
| **Example** | sip as-feature-event subscription period: 600 |

### *Configuring Server-Side DND, CFWD, and ACD Using the Aastra Web UI*

Use the following procedure to enable/disable the server-side “as-feature-event” on the IP Phone using the Aastra Web UI..

## Aastra Web UI

1 Click on **Advanced Settings->LineN->Advanced SIP Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Configuration Line 1**

**Advanced SIP Settings**

Missed Call Summary Subscription ☐ Enabled

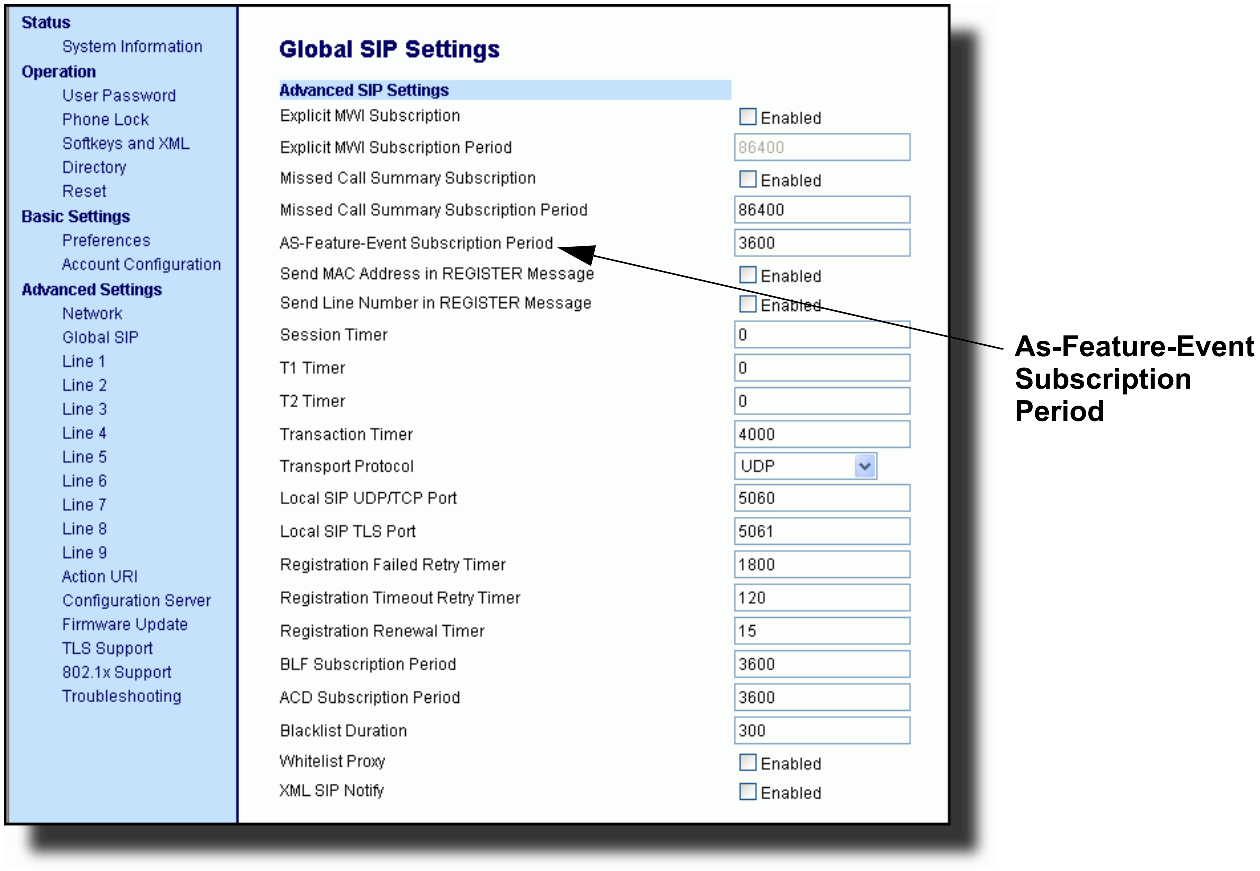
AS-Feature-Event Subscription ☐ Enabled

2 In the “Advanced SIP Settings” section, enable the "**As--Feature-Event Subscription**" field, by checking the check box. (Disable this field by unchecking the box).

3 Click Save Settings to save your changes.

## Aastra Web UI

4 Click on **Advanced Settings->Global SIP->Advanced SIP Settings**.


Status
System Information
Operation
User Password
Phone Lock
Softkeys and XML
Directory
Reset
Basic Settings
Preferences
Account Configuration
Advanced Settings
Network
Global SIP
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Action URI
Configuration Server
Firmware Update
TLS Support
802.1x Support
Troubleshooting

**Global SIP Settings**

**Advanced SIP Settings**

| | |
|---|---|
| Explicit MWI Subscription | ☐ Enabled |
| Explicit MWI Subscription Period | 86400 |
| Missed Call Summary Subscription | ☐ Enabled |
| Missed Call Summary Subscription Period | 86400 |
| AS-Feature-Event Subscription Period | 3600 |
| Send MAC Address in REGISTER Message | ☐ Enabled |
| Send Line Number in REGISTER Message | ☐ Enabled |
| Session Timer | 0 |
| T1 Timer | 0 |
| T2 Timer | 0 |
| Transaction Timer | 4000 |
| Transport Protocol | UDP |
| Local SIP UDP/TCP Port | 5060 |
| Local SIP TLS Port | 5061 |
| Registration Failed Retry Timer | 1800 |
| Registration Timeout Retry Timer | 120 |
| Registration Renewal Timer | 15 |
| BLF Subscription Period | 3600 |
| ACD Subscription Period | 3600 |
| Blacklist Duration | 300 |
| Whitelist Proxy | ☐ Enabled |
| XML SIP Notify | ☐ Enabled |

**As-Feature-Event Subscription Period**

5 In the “Advanced SIP Settings” section, in the “**As-Feature-Event Subscription Period**” field, enter the amount of time, in seconds, that the phone waits after sending a SUBSCRIBE, to recieve a NOTIFY response from the server side.
Default is 3600. Valid values are

6 Click Save Settings to save your changes.

# Issues Resolved on Series 5i Phones in Release 2.2

This section describes the issues resolved on the Series 5i IP phones in Release 2.2. The following table provides the issue number and a brief description of each fix.

➡ **Note:** Unless specifically indicated, these resolved issues apply to all phone models.

| Issue Number | Description of Fix |
|---|---|
| ***User Interface*** | |
| **DEF07409** | Phones no longer display "Unknown Name" when making outbound calls. |
| **DEF07815** | You can no longer edit a locked speed dial key from the IP Phone UI. |
| **DEF07876** | Speeddial page in the Aastra Web UI now returns a confirmation page after clicking the "SAVE SETTINGS" button. |
| **DEF07901** | When adding a directory entry from the IP Phone UI, the phone now prompts the user to enter a phone number if they try to exit this field before entering a number.. |
| **DEF08025** | 51i/53i: Phone no longer truncates the time and date on the display when the time format is set to 1 and date format is set to 3. |
| **DEF08224** | You can now set the date via the IP Phone UI when using a non-Aastra supported language pack. |
| **DEF08595** | 51i: The lock icon now displays during SRTP calls.<br>**Note:** The SRTP implementation in the previous release is not fully compatible with the new SRTP in release 2.2. There is a change in the upgraded libsrtp library on the phone which causes interoperability problems for certain codecs between old releases and the new 2.2. release. It is highly recommended that if you are using SRTP, all phones are upgraded to release 2.2. |
| **DEF08621** | A re-INVITE now updates the Caller ID. |
| **DEF08645** | When the DND key is configured on an expansion module, the DND status is now preserved via a reboot of the phone. |
| **DEF08829** | 57iCT: The MWI icon on the cordless handset now functions correctly. |

| Issue Number | Description of Fix |
|---|---|
| **DEF08852** | Auto-answer calls are no longer rejected when you are already in a call; they are now treated as normal calls. The previous behavior affected Fonality HUD users. |
| ***SIP*** | |
| **DEF07873** | Display name portion of the FROM and TO SIP headers are now correctly quoted, allowing support for characters such as (, ), [, ] |
| **DEF08132** | Phones now support updating the RTP destination when the call is taken off hold – this was causing lost voice path on some servers after transfer. |
| **DEF08245** | Phones now send an ACK and the call is cleared down correctly when the far-end answers the call at the same time that a CANCEL is sent. |
| **DEF08494** | Phones initiating the transfer now clear down the transferred call, rather than relying on the transferee. This fixes issues with other clients that didn't clear down the call when they were the transferee. |
| **DEF08558** | RFC2833 - DTMF support is no longer advertised when the phone is configured to only use in-band RTP. |
| **DEF08612** | Phones now support updating the Codec when the call is taken off hold– this was causing lost voice path after a call was put on hold. |
| **DEF08619** | Phones now re-subscribe for SCA and MWI events after receiving a 481 error, which can happen after a server reboot. |
| **DEF08632** | Phones now clear down a held call on receipt of a 481 in response to an unhold attempt or a transfer attempt. |
| **DEF08641** | Phones no longer send SDP in the ACK message for calls involving early media. |
| **DEF08649** | Phones now support OPTIONS packets within a dialog. |
| **DEF08664** | Phones now support Persistent TLS connections using DNS SRV records. |
| **DEF08672** | Phones now work correctly behind an ADTRAN TA924E. |
| **DEF08678** | Phones now respond to authentication challenges when running behind an Edgemarc. |
| **DEF08835** | Phones now handle sequence rollovers in SRTP calls correctly. |
| **DEF08836** | Phones now include SRTP encryption information in re-INVITE requests. |
| **DEF08846** | Phones no longer send a re-INVITE if the user does not enter any more digits after receiving a "484 Address Incomplete" response. |
| ***XML*** | |
| **DEF07986** | Phones now correctly parse XML objects that have a 'space' at the end of a URI. |
| **ENH08004** | List objects now support up to 30 items. |
| **DEF09150** | FastReboot now works correctly when no language packs installed. |

| Issue Number | Description of Fix |
|---|---|
| ***Robustness*** | |
| **DEF07948** | Phones now work properly when they fail to renew a registration, either because of network issues or because of SIP message floods. |
| **DEF08186** | Phones now corrently clear down the call when making a call to a paging group and when the phones monitor all the group members via BLF. |
| **DEF08330** | Phones no longer have a resource leak when they are flooded by SIP retransmissions. This issue lead to the phone not being able to make or receive calls. It also prevented the transfer of existing calls. |
| **DEF08555** | Phones no longer have a memory leak when processing Syantro BLA messages |
| **DEF08574** | Phones no longer have a memory leak when parsing XML Image Screen and Image Menu Screen objects. |
| **DEF08596** | Sipera VIPER 2007-0037 security advisory has been resolved. |
| **DEF08597** | Sipera VIPER 2007-0038 security advisory has been resolved. |
| **DEF08655** | Phones no longer have a small memory leak when using XML Input Screen objects. |
| **DEF08746** | Phones now work properly when connecting to a 3CX server and a transfer is attempted. |
| **DEF08851** | Phones now work properly after processing a 484 Address Incomplete message. |
| ***Other*** | |
| **DEF08634** | Auto-sync time setting format is now independent of the phones language setting. |

# Contacting Aastra Telecom Support

If you've read this release note, and consulted the Troubleshooting section of your phone model's manual and still have problems, please send inquiries via email to support@aastra.com.

# Generic SIP IP Phone Model 5i Series

## 2.2 Release Notes

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